DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Solid and Hazardous Waste Commission/Hazardous Materials and Waste Management Division

HAZARDOUS WASTE - STATEMENTS OF BASIS AND PURPOSE

6 CCR 1007-3 Part 8

[Editor's Notes follow the text of the rules at the end of this CCR Document.]

Statement of Basis and Purpose – Rule-making Hearing of May 18, 1993

Hazardous Waste Management System; Identification and Listing of Hazardous Waste; Wood Preserving

8.1 Basis and Purpose.

These amendments to 6 CCR 1007-3, sections 100.41(b), 261.4(a), 262.34, 261.35(b), 264.190, 264.570, 264.571264.572, 264.573264.574, 264.575, 265.190, 265.440, 265,441, 265.442, 265.443, 265.444 and 265.445 an promulgated pursuant to the authority granted the Hazardous Waste Commission in section 25-15-302(2), C.R.S. Effective June 6,1991 the Environmental Protection Agency ("EPA") adopted amendments to rules under the Resource Conservation and Recovery Act listing as hazardous three categories of wastes from wood preserving operations that use chlorophenolic, creosote, and/or inorganic (arsenical and chromium) preservatives. The listings included wastewaters, process residuals, preservative drippage, and spent preservatives from wood preserving processes at facilities that use or have previously used chlorophenolic formulations, facilities that use creosote formulations, and facilities that use inorganic preservatives containing arsenic or chromium. The rules also included permitting and interim status standards for drip pads used to assist in the collection of treated wood drippage. The promulgation of these rules provide state equivalency with the rules of the EPA and assure authorization of the state hazardous waste program.

This Basis and Purpose incorporates by reference the preamble language for these amendments published in the Federal Register at 55 FR 50450-50489 and 56 FR 30192-30198.

In the preamble to the federal rule published December 6, 1990, 55 FR 50450, the EPA stated that certain information collection requirements in the federal rule would not be effective until the Office of Management and Budget ("OMB") had reviewed and approved them. The preamble to the federal amendments to the December 6, 1990 rule, published July 1, 1991, 56 FR 30192 indicates that the OMB had reviewed and approved the information collection request, although the rule as published in the 1992 Code of Federal Regulations: continues to state that the effective data for these requirements remains contingent upon OMB approval. Despite this confusion in the federal rules, the Commission has determined that the effective date for the information collection requirements should not be delayed. Testimony indicated that the recordkeeping requirements should not add significantly to the existing requirements of either the Division or facilities affected by these requirements.

Statement of Basis and Purpose – Rule-making Hearing of July 20, 1993

Wood Preserving; Identification and Listing of Hazardous Waste; Standards and Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities

8.2 Basis and Purpose

These amendments to 6 CCR 1007-3, sections 261.31, 264.570, 264.571, 264.572, 264.573, 265.440, 265.441, 265.442, and 265.443 are promulgated pursuant to the authority granted the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

Effective December 24,1992, the Environmental Protection Agency (EPA) adopted amendments to rules under the Resource Conservation and Recovery Act (RCRA) that finalized modifications proposed on December 5, 1991 (56 FR 63848) to the wood preserving waste listings and drip pad regulations originally promulgated on December 6,1990 (55 FR 50450). These amendments modify the F032, F034, and F035 hazardous waste listings and portions of the subpart W requirements for drip pads. The listings of hazardous waste from the wood preserving industry include wastewaters, process residuals, preservative drippage, and spent formulations from wood preserving processes generated at plants that use or have used pentachlorophenol (F032), that currently use creosote (F034), or that currently use inorganic preservatives containing arsenic or chromium (F035).

The promulgation of these rules provide state equivalency with the regulatory requirements of the Environmental Protection Act. This Basis and Purpose incorporates by reference the preamble language for this amendment published in the Federal Register beginning at 57 FR 61492 on December 24, 1992.

Statement of Basis and Purpose – Rule-making Hearing of August 17, 1993

Hazardous Waste Management System; Identification and Listing of Hazardous Waste

8.3 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 261, 262, 264, 265, 268, and 100 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

Land Disposal Restrictions for Third Third Wastes

On June 1, 1990, the Environmental Protection Agency published regulations promulgating prohibitions on land disposal of the Third Third scheduled hazardous wastes. These amendments correct errors and clarifies the language in the regulations of the June 1, 1990 final rule. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 56 FR 3864-3928, January 31, 1991.

Land Disposal Restrictions for Electric Arc Furnace Dust (K061)

These amendments revise and finalize treatment standards for K061 nonwastewaters in the high zinc subcategory (i.e., containing equal to or greater than 15% total zinc, determined at the point of generation), that were originally regulated in the First Third Land Disposal Restrictions rule addressed by 53 FR 31138; August 17, 1998. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 56 FR 41164-41178, August 19, 1991.

Land Disposal Restrictions for Third Third Scheduled Wastes

On June 1, 1990, the Environmental Protection Agency published regulations promulgating prohibitions on land disposal of the Third Third scheduled wastes. These amendments correct errors and clarifies the language in the regulations of the June 1, 1990 Third Third final rule. This rule is the second correction to the Third Third rule, preceded by a January 31, 1991 rule (56 FR 3864) that made extensive amendments to the Third Third rule. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 57 FR 8086-8089, March 6, 1992.

Statement of Basis and Purpose – Rule-Making Hearing of August 17, 1993.

Hazardous Waste Management System; Identification and Listing of Hazardous Waste

8.4 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 261, 264, 265, and 268 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

Land Disposal Restrictions for First Third Wastes

The Environmental Protection Agency promulgated regulations restricting the land disposal of hazardous waste, and establishing specific treatment standards and effective dates for certain so-called “First Third” wastes. These amendments were previously adopted in Colorado, but were inadvertently deleted. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 53 FR 31138-31222, August 17, 1988, and as amended at 54 FR 8264-8266, February 27, 1989.

Land Disposal Restrictions for Second Third Wastes

The Environmental Protection Agency promulgated regulations implementing the Congressionally mandated prohibitions on land disposal of hazardous wastes listed in 40 CFR 268.11, and establishing specific treatment standards and effective dates for certain so-called “Second Third” wastes. These amendments were previously adopted in Colorado, but were inadvertently deleted. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 54 FR 26594-26652, June 23, 1989.

Land Disposal Restrictions for Third Third Wastes

The Environmental Protection Agency promulgated regulations restricting the land disposal of hazardous waste, and establishing specific treatment standards and effective dates for certain so-called “Third Third” wastes. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 55 FR 22520-22720, June 1, 1990.

Toxicity Characteristic Revisions

On March 29, 1990 (55 FR 11798), the Environmental Protection Agency promulgated regulations revising the existing toxicity characteristics, which are used to identify those wastes defined as hazardous and which are subject to regulation under subtitle C of the Resource Conservation and Recovery Act (RCRA) due to their potential to leach significant concentrations of specific toxic constituents. This rule broadened and refined the scope of the hazardous waste regulatory program and fulfilled specific statutory mandates under the Hazardous and Solid Waste Amendments of 1984 (HSWA). This rule replaced the Extraction Procedure (EP) leach test with the Toxicity Characteristic Leaching Procedure (TCLP).

Appendix II, Method 1311 of the March 29, 1990 final rule was replaced in its entirety by Method 1311 of the June 29, 1990 final rule (55 FR 26986) in order to ensure consistency of the TCLP, Method 1311, with other methods contained in Test Methods for Evaluating Solid Waste (Physical/Chemical Methods), SW-846 and to clarify the sections on quality assurance. The June 29, 1990 rule also corrected several typographical errors and other omissions that appeared in the March 29, 1990 final rule.

These amendments were previously adopted in Colorado. Today's amendments modify the previously adopted regulations by removing the Toxicity Characteristic Leaching Procedure (TCLP) published in Appendix I of Part 268, and correct any other typographical errors and inadvertent omissions to provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 55 FR 11798-11877, March 29, 1990, and as amended at 55 FR 26986-26998, June 29, 1990.

Statement of Basis and Purpose – Rule-making Hearing of October 19, 1993

8.5 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 261, 264, 265, 266, 268, and 100 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

Land Disposal Restrictions

These amendments delete the May 8, 1992 effective date contained in the current regulation and revise the existing prohibitions of land disposal to include debris contaminated with 268.10, 268.11 and 268.12 wastes and debris contaminated with any characteristic wastes having Subpart D, Part 268 treatment standards. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 57 FR 20766-20770, May 15, 1992.

Delay of Closure Period for Hazardous Waste Management Facilities

On August 14, 1989, the Environmental Protection Agency (EPA) amended portions of the closure requirements under subtitle C of the Resource Conservation and Recovery Act (RCRA) applicable to owners and operators of certain types of hazardous waste facilities. The August 14, 1989 final rule details the limited circumstances under which a landfill, surface impoundment, or land treatment unit may remain open after the final receipt of hazardous wastes in order to receive non-hazardous wastes in that unit, and describes the conditions applicable to such units. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 54 FR 33376-33398, August 14, 1989.

Hazardous Waste Management System: Testing and Monitoring Activities

On September 29, 1989, The Environmental Protection Agency (EPA) published regulations which adopt 47 testing methods as approved methods for use in meeting the regulatory requirements under subtitle C of the Resource Conservation and Recovery ACT (RCRA). These new methods are found in the Third Edition of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Office of Solid Waste Publication SW-846, and its Revision I. A March 9, 1990 technical correction to this September 29, 1989 final rule adds a list of the 47 analytical testing methods to the section of the regulations that incorporates these methods by reference, § 260.11(a). This amendment also corrects Tables 2 and 3 of Appendix III to Part 261. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 54 FR 40260-40269, September 29, 1989, and at 55 FR 8948-8950, March 9, 1990.

Land Disposal Restrictions for Newly Listed Wastes and Hazardous Debris

On August 18, 1992, the Environmental Protection Agency adopted regulations finalizing treatment standards under the land disposal restrictions (LDR) program for certain hazardous wastes listed after November 8, 1984, pursuant to a proposed consent decree filed with the District Court that established a promulgation date of June 1992 (EDF v. Reilly, Civ. No. 89-0598, D.D.C). These regulations also finalize revised treatment standards for debris contaminated with listed hazardous waste or debris that exhibits certain hazardous waste characteristics, and several revisions to previously promulgated standards and requirements. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 57 FR 37194-37282, August 18, 1992.

Identification and Listing of Hazardous Waste: CERCLA Hazardous Substance Designation Reportable Quantity Adjustment Coke By-Products Wastes

On August 18, 1992, the Environmental Protection Agency amended its regulations under RCRA by listing as hazardous seven wastes generated during the production, recovery, and refining of coke by-products produced from coal. These wastes are: K141 through K145, K147 and K148. Appendix VII of Part 261 is also amended by adding the constituents for which these wastes are being listed. In addition, this amendment finalizes the proposed determination not to list as hazardous wastes, wastewaters from coking and tar refining operations. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 57 FR 37284, August 18, 1992.

Correction of Typographical Errors and Omissions

In addition these amendments also correct typographical errors and inadvertent omissions that occur in the current regulations.

Statement of Basis and Purpose – Rule-making Hearing of November 16, 1993

8.6 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 262, and 265 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

Exports of Hazardous Waste: Technical Correction

On September 4, 1991, the Environmental Protection Agency (EPA) published a technical correction concerning the notification of intent to export. These revisions amend § 262.53 and § 262.56 originally introduced into the regulations by 51 FR 28664 (August 8, 1986), by changing the office to which the notifications of export activities must be sent, from the Office of International Activities to the Office of Waste Programs Enforcement. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 56 FR 43704-43705, September 4, 1991.

Amendments to Interim Status Standards for Downgradient Ground-Water Monitoring Well Locations at Hazardous Waste Facilities

On December 23, 1991, the Environmental Protection Agency (EPA) promulgated a final rule implementing amendments to § § 260.10 and 265.91. These amendments allow facilities to install alternate ground-water monitoring wells at interim status facilities where existing physical obstacles prevent installations at the limit of the waste management area. Today's rule provides that the owner or operator of an existing facility may demonstrate that an alternate hydraulically downgradient monitoring well location will meet several criteria. This demonstration must be certified by a qualified ground-water scientist. Today's rule also promulgates a definition of “qualified ground-water scientist.” These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 56 FR 66365-66369, December 23, 1991.

Statement of Basis and Purpose – Rule-making Hearing of January 18, 1994

8.7 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 261, 262, 264, 265, 268, and 100 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

Hazardous Waste Treatment Storage, and Disposal Facilities-Organic Air Emission Standards for Process Vents Equipment Leaks

On June 21, 1990, the Environmental Protection Agency promulgated standards that limit organic air emissions as a class at hazardous waste treatment, storage, and disposal facilities (TSDF) requiring a permit under subtitle C of RCRA. This action is the first part of a multiphased regulatory effort to control air emissions at new and existing hazardous waste TSDF. This rule establishes final standards limiting organic emissions from (1) process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction, and air or steam stripping operations that manage hazardous wastes with 10 parts per million by weight (ppmw) or greater total organics concentration, and (2) leaks from equipment that contains or contacts hazardous waste streams with 10 percent by weight or greater total organics. An April 26, 1991 technical amendment corrects typographical errors in the regulatory text of the June 21, 1990 final rule. These amendments provide slate equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 55 FR 25454-25519, June 21, 1990, and at 56 FR 19290, April 26, 1991.

Requirements of Rulemaking Petitions

One of several requirements created when the Hazardous and Solid Waste Amendments (HSWA) were signed into law on November 8, 1984, was to establish additional and more specific criteria for evaluating petitions submitted under 40 CFR 260.20 and 260.22, to exclude ("delist") specific wastes from the lists of hazardous wastes contained in 40 CFR 261.31, 261.32, and 26133. These amendments clarify an ambiguity created when EPA inadvertently failed to alter 40 CFR 260.22(b) when modifying the other portions of § 260.22, to ensure that the entire delisting program is consistent with HSWA. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 54 FR 27114-27117, June 27, 1989.

Spent Pickle Liquor From Steel Finishing Operations

On May 28, 1986 (51 FR 19320), EPA promulgated a rule to amend the regulations for hazardous waste management under the Resource Conservation and Recovery Act by stating that the listing for spent pickle liquor from steel finishing operations (EPA Hazardous Waste No. K062) applies only to wastes generated by iron and steel facilities. EPA issued a technical correction to this amendment on September 22, 1986 (51 FR 33612). One person questioned whether this action was a rule requiring prior notice and opportunity to comment. In response, on May 6, 1987, (52 FR 16982), EPA proposed an amendment to the rule and finalized that action on August 3, 1987 (52 FR 28697), by adopting the final rule stating that the listing applies to spent pickle liquor produced by any plant in the iron and steel industry. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Agency regulations published in the Federal Register at 52 FR 28697-27698, August 3, 1987.

Standards for Hazardous Waste Storage and Treatment Tank Systems

On August 15, 1986 (51 FR 29430), EPA issued a final rule to correct typographical and other errors in a final rule for hazardous waste storage and treatment tank systems under the Resource Conservation and Recovery Act (RCRA) that appeared in Federal Register of July 14, 1986 (51 FR 25422). These amendments provide state equivalency with the regulatory requirements of EPA.

This Basis and Purpose incorporates by reference the preamble language for the EPA regulations published in the Federal Register at 51 FR 29430-29431, August 15, 1986.

Farmer Exemptions: Technical Corrections

On August 8, 1986, EPA promulgated regulations for the export of hazardous waste under the Resource Conservation and Recovery Act (RCRA), and in doing so moved the RCRA farmer exemption to a new section in the Code of Federal Regulations (CFR). EPA, however, failed to modify a number of other sections in the CFR which refer to the farmer exemption by section. Then, on July 8, 1987, EPA sought to amend the farmer exemption to make it clear that farmers who were otherwise exempt from hazardous waste regulations were also exempt from land disposal restrictions. In doing so, however EPA inadvertently moved the farmer exemption back to its old section (which was already occupied by the export regulations). The July 19, 1988 amendments correct these errors. These amendments were previously adopted in Colorado. Today's amendments correct an inadvertent omission to provide state equivalency with the regulatory requirements of EPA.

This Basis and Purpose incorporates by reference the preamble language for the EPA regulations published in the Federal Register at 53 FR 27164-27165, July 19, 1988.

Treatability Studies Sample Exemption

On July 19, 1988, the Environmental Protection Agency issued a final rule that conditionally exempts waste samples used in small-scale treatability studies from Subtitle C regulation. Consequently, generators of the waste samples and owners or operators of laboratories or testing facilities conducting such treatability studies will be exempt from the Subtitle C hazardous waste regulations, including the permitting requirements, when certain conditions are met. These amendments were previously adopted in Colorado. Today's amendments correct typographical errors and inadvertent omissions to provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 53 FR 27290-27302, July 19, 1988.

Permit Modifications for Hazardous Waste Management Facilities

On September 28, 1988, the Environmental Protection Agency promulgated a final rule that established new procedures that applied to changes that facility owners and operators may want to make at their facilities. EPA categorized selected permit modifications into three classes and established administrative procedures for approving modifications in each of these classes. The purpose of these amendments is to provide owners and operators more flexibility to change specified permit conditions, to expand public notification and participation opportunities, and to allow for expedited approval if no public concern exists for a proposed permit modification. These amendments were previously adopted in Colorado. Today's amendments correct typographical errors and inadvertent omissions to provide state equivalency with the regulatory requirements of EPA.

This Basis and Purpose incorporates by reference the preamble language for the EPA regulations published in the Federal Register at 53 FR 37912-37942, September 28, 1988, and as amended at 53 FR 41649, October 24, 1988.

Changes to Interim Status Facilities for Hazardous Waste Management: Modifications of Hazardous Waste Management Permits Procedure for Post-Closure Permitting

On March 7, 1989, the Environmental Protection Agency promulgated amendments to the hazardous waste regulations under RCRA governing changes at interim status and permitted facilities, including redesignation of certain permit modifications as Class 1. The March 7, 1989 final rule also amended the hazardous waste permitting regulations to clarify the Agency's authority to deny permits for the active life of a facility while a permit decision with respect to the post-closure period remains pending.

Colorado is only adopting the amendments which modify the regulations at 40 CFR § 270.42, to reclassify as Class 1 certain permit modifications necessary to enable facilities to comply with the land disposal restrictions. Specifically, it allows owners and operators of permitted facilities to add new waste codes, or a narrative description, to a permit as Class 1 modifications where the added wastes are: (1) Restricted wastes that have been treated to meet the applicable Part 268 treatment standard, or (2) residues from treating so called “soft hammer” wastes, and (3) certain wastewater treatment residues and incinerator ash. The rule also allows as a Class 1 modification, without prior approval, the addition of new wastes for treatment in tanks or containers under certain limited conditions. Finally, the rule allows as a Class 1 modification, with prior Department approval, the addition of new treatment processes, as long as those processes are necessary to treat restricted wastes to meet treatment standards and the treatment processes are to take place in tanks or containers.

This Basis and Purpose incorporates by reference the preamble language for the EPA regulations published in the Federal Register at 54 FR 9596-9609, March 7, 1989.

Treatment by Generators

This rule allows treatment of hazardous wastes by generators in tanks or containers and allows for the Division to apply additional standards to ensure protection of health and the environment on a case-by case basis.

Prior to this rule, generators were required to obtain a treatment permit in order to treat their own hazardous waste in containers or tanks onsite. This permitting process was often lengthy and expensive. Rather than go through the permitting process, most generators chose to ship their waste offsite without the benefit of first reducing the quantity or toxicity of their wastes. This resulted in more waste transported offsite to commercial treatment facilities, or to land disposal facilities, at greater costs to generators. This rule allows generators to treat certain wastes prior to shipping offsite thus reducing volume, toxicity, or increasing the ability to recycle or reclaim such wastes, and decreasing environmental and health risks as well as costs to ship and process the wastes.

Because of the inherent dangers of fire explosion, or evolution of toxic gases, involved in thermal treatment and treatment of reactive waste, these are excluded from this permit by rule. Such treatment is subject to full permitting requirements of Part 100 of these rules.

Correction of Typographical Errors and Omissions

In addition, these amendments also correct typographical errors and inadvertent omissions that occur in the current regulations.

Statement of Basis and Purpose – Rule-making Hearing of February 15, 1994

8.8 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 264, 265, and 100 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

Incorporation by Reference

These amendments fulfill the requirements of Section 24-4-103 (12.5), C.R.S. That section requires materials incorporated by reference to list the title and address of the individual at the agency who can provide information regarding the incorporated materials. These amendments also state that any incorporated materials contained in 6 CCR 1007-3 do not include any later amendments as required by § 24-4-103 (12.5), C.R.S.

Liners and Leak Detection Systems for Hazardous Waste Land Disposal Units

On January 29, 1992, the Environmental Protection Agency (EPA) adopted a final rule which modifies the existing regulations concerning liner and leachate collection and removal systems for hazardous waste surface impoundments, landfills, and waste piles. The rule also requires owners and operators of hazardous waste surface impoundments, landfills and waste piles to install and operate leak detection systems at such time as these units are added, laterally expanded, or replaced. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 57 FR 3462-3496, January 29, 1992.

Statement of Basis and Purpose – Rule-making Hearing of March 15, 1994

8.9 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 261, 262, 264, 265, 266, 267, 268, and 100 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

Toxicity Characteristics Revisions: Technical Corrections

On March 29, 1990, the Environmental Protection Agency (EPA) promulgated a rule (55 FR 11798) to revise the existing toxicity characteristics (TC) used to identify certain wastes defined as hazardous; these wastes are regulated under subtitle C of the Resource Conservation and Recovery Act (RCRA) due to their potential to leach significant concentrations of specific toxic constituents. In the preamble, the exclusion from subtitle C regulation for arsenical-treated wood and wood products was revised inappropriately. This rule corrects that revision. Today's rule also deletes two additional references to the Extraction Procedure (EP) Toxicity Characteristic and replaces them with references to the TC.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 57 FR 30657-30658, July 10, 1992.

Financial Responsibility for Third-Party Liability Closure, and Post-Closure

Effective September 16, 1992, the Environmental Protection Agency adopted amendments to its financial assurance requirements under subtitle C of the Resource Conservation and Recovery Act (RCRA) that finalized modifications proposed on July 1, 1991. This final rule amends the regulations related to third-party liability coverage, corrects errors and clarifies the language in the regulations of the July 1, 1991 proposed rule. The proposed amendments affect the claims reporting provisions and provisions for obtaining a letter of credit. The amendments expand the use of non-parent corporate guarantees to owners and operators of hazardous waste facilities for demonstrating financial responsibility for closure and post-closure care. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

In addition these amendments remove the trust fund pay-in period for permitted or existing interim status facilities and require the trust fund be fully funded within 30 days of the effective date of these regulations. The previous lengthy pay-in period had resulted in inadequate funding for closure and/or post-closure when the facility entered into bankruptcy prior to the completion of the pay-in period. To lessen the possibility of inadequate coverage the Commission, after extensive discussion, decided to abolish the pay-in period.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 56 FR 30201-30227, July 1, 1991, and at 57 FR 42832-42844, September 16, 1992

Financial Responsibility: Settlement Agreement

On March 19, 1985, the Environmental Protection Agency (EPA) proposed to amend portions of the closure and post-closure care and financial responsibility requirements applicable to owners and operators of hazardous waste treatment, storage, and disposal facilities (TSDFs) (50 FR 11068). On May 2, 1986, EPA promulgated the amendments in their final form. These amendments were previously adopted in Colorado. Today's amendments correct typographical errors and inadvertent omissions to provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 51 FR 16422-16459, May 2, 1986, and as amended at 53 FR 7740-7741, March 10,1988, and at 55 FR 25976-25977, June 26, 1990.

Amendment to Change "Director" to Administrator"

Amendments were also made so that petitions to allow land disposal of wastes prohibited under Subpart C of Part 268 are submitted to, and decisions regarding applicability of and variances from treatment are sought from and made by the Administrator of the Environmental Protection Agency instead of the Director of the Hazardous Materials and Waste Management Division. These amendments were made in response to comments from EPA that this authority is nondelegable and are necessary for state authorization.

Correction of Typographical Errors and Omissions

In addition these amendments also correct typographical errors and inadvertent omissions that occur in the current regulations.

Statement of Basis and Purpose – Rule-making Hearing of May 17, 1994

8.10 Basis and Purpose.

These amendments to the Colorado Hazardous Waste Regulations, 6 CCR 1007-3, Parts 260, 264, 265, 268 and 100 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S., of the Colorado Hazardous Waste Act.

Corrective Action Management Units and Temporary Units: Corrective Action Provisions Under Subtitle C.

On February 16, 1993, pending the promulgation of the comprehensive Subpart S regulations governing corrective actions under the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. 6901, the U.S. Environmental Protection Agency ("EPA") adopted final rules concerning corrective action management units ("CAMUs") and temporary units under Subpart S of 40 CFR 264. These final rules allow for exceptions from the otherwise generally applicable land disposal restrictions ("LDRs") and minimum technology requirements ("MTRs") for certain wastes managed during corrective action activities ("remediation wastes") at CAMUs or temporary units located at a RCRA hazardous waste management facility. EPA's purpose in adopting these final rules was to facilitate corrective action at RCRA facilities by providing additional flexibility to regulators in order to expedite and improve remedial decisions and the management of these remediation wastes.

These final federal rules significantly reduced the federal regulatory requirements otherwise applicable to the management of remediation wastes during corrective action at a RCRA facility. Because these federal rules are less stringent than existing state corrective action requirements, Colorado is not required to adopt corresponding state analogs to the federal rules to maintain authorization of its hazardous waste management program under RCRA. However, the Hazardous Waste Commission believes that state analogs to the federal rules concerning CAMUs and temporary units should be adopted.

The Hazardous Waste Commission recognizes that LDRs and MTRs are regulatory concepts developed to control, and minimize the generation of, hazardous wastes generated from ongoing industrial production processes or other industrial activities. The Hazardous Waste Commission also recognizes that remediation wastes managed during corrective action activities at RCRA facilities may be different from hazardous wastes generated from these industrial activities. Because of these differences, including, but not limited to, physical and chemical differences, the Hazardous Waste Commission believes that for the most part these remediation wastes can be managed without requiring compliance with the otherwise applicable LDRs and MTRs and yet still provide protection to human health and the environment. Further, the Hazardous Waste Commission believes that affording relief from the otherwise applicable LDRs and MTRs for the management of remediation wastes at CAMUs and temporary units will facilitate corrective action at RCRA facilities.

The Hazardous Waste Commission does, however, recognize that there will be specific cases where the application of the LDRs or MTRs to the management of remediation wastes at CAMUs or temporary units will be necessary to protect human health and the environment.

The Hazardous Waste Commission has today adopted state analogs which are patterned after and are very similar to, and it is the general intent of the Hazardous Waste Commission that they be interpreted in a manner consistent with, the federal rules concerning CAMUs and temporary units. In that regard, this Statement of Basis and Purpose hereby incorporates by reference the preamble language for the federal rules adopted by the EPA as published at 58 FR 8658 to 8685, February 16, 1993.

The Hazardous Waste Commission has, however, made certain changes to the state analogs to account for certain differences in state law from federal law, to address state issues, and express the Hazardous Waste Commission's intent in adopting the rules. The basis and purpose of these changes are explained below.

The definitions of "disposal facility" and "landfill" in part 260.10, and part 264.552(a)(2) were amended to specifically list the otherwise generally applicable regulatory requirements in part 264, part 265 and part 268, including LDRs and MTRs, which would not apply to the management of remediation wastes at a CAMU. Also, a new subsection (3) was added to part 264.552(a) to specifically identify otherwise generally applicable regulatory requirements that will continue to apply to CAMUs, including, but not limited to, the hazardous waste siting requirements if the remediation wastes remaining in place after closure of the CAMU are hazardous wastes.

The Hazardous Waste Commission's intent is that CAMUs be excepted from the MTRs in subparts K, L, M, and N of part 264 and part 265, and from subparts F (groundwater protection) and G (closure and post closure). Groundwater monitoring and closure and post-closure requirements for the CAMU will instead be established by the Department of Health pursuant to part 264.552(e) on a case-by-case basis.

The inclusion of new subsection (3) of part 264.552(a) clarifies that where remediation wastes placed into a CAMU would be considered hazardous wastes under the Colorado Hazardous Waste Regulations, the owner/operator of the RCRA facility must ensure compliance of the CAMU and its associated management activities with subparts B (general facility standards), C (preparedness and prevention), D (contingency plan and emergency procedures), and E (manifest system, recordkeeping and reporting). In many instances, this will simply mean the owner/operator of the RCRA facility will need to amend existing facility plans. Based upon the statutory requirement in part 2 of the Colorado Hazardous Waste Act, § 25-15-201, C.R.S., that disposal of hazardous waste on one's own property is permitted only if the disposal complies with the hazardous waste siting regulations. CAMUs with hazardous remediation wastes remaining in place after closure must comply with Part 2. As concerns compliance with the hazardous waste siting regulations, hazardous waste disposal at a CAMU is no different from hazardous waste disposal at any other site. However, it is the intent of the Hazardous Waste Commission that the hazardous waste siting requirements be applied in a manner which takes into consideration the purposes and objectives of CAMUs.

The definition of “facility” in part 260.10 was amended to more clearly indicate that the subsection (2) definition of facility applied to corrective action required pursuant to either of the corrective action provisions of the Colorado Hazardous Waste Regulations, or to the statutory corrective action provision in the Colorado Hazardous Waste Act.

The definition of “remediation waste” in part 260.10 was amended to include solid waste, irrespective of whether the solid waste contains a listed hazardous waste or exhibits a hazardous waste characteristic as indicated by the federal definition. A solid waste that contains a listed hazardous waste or exhibits a hazardous waste characteristic is a hazardous waste. Without the amendment, the reference to solid waste in the definition of “remediation waste” would be superfluous. The language of the preamble concerning the federal definition is consistent with the amendment made to the state analog and the Hazardous Waste Commission believes the amendment more accurately reflects its intent.

Part 264.552(c) of the federal rule required that regulators designate CAMUs in accordance with certain identified factors. Three of the seven listed factors were amended by the Hazardous Waste Commission in adopting a state analog to part 264.552(c). The “minimize releases to the extent practicable” standard in factor (4) of the federal rule for designating a CAMU was amended to require that a CAMU be designated only if it will meet the closure standard for CAMUs under part 264.552(e)(4)(i)(B). The Hazardous Waste Commission believes that only CAMUs which the Department of Health believes can meet the closure standard should be designated and by making the standard for designation and closure the same, the possibility that a CAMU could be designated which would not meet the closure standard is avoided.

Factors (5) and (7) of the federal rule respectively state preferences for expediting the timing of remedial activity and for minimizing the land area upon which remediation wastes would remain in place. It was clear from the language of the preamble concerning these factors that the stated preferences were, however, not to be absolutes. The federal rule in fact attempted to qualify the preferences by requiring timing to be expedited and land area to be minimized only to the extent “practicable.”

The Hazardous Waste Commission believes “practicable” is ambiguous, and it is the Hazardous Waste Commission's intent to eliminate ambiguity in its regulations. The Hazardous Waste Commission's intent is that CAMUs should comply with the goals stated in § § 264.552(c)(1) and (2).

Part 264.552(e)(4)(ii)(B) and 264.552(e)(4)(iv) were amended to include a reference indicating that the Department of Health may require a CAMU to be lined where necessary to protect human health or the environment. The Hazardous Waste Commission does not intend that liners be required on all CAMUs, only on those CAMUs where they are necessary for the protection of human health and the environment.

Part 264.552(e)(4)(iv) was also amended to include a requirement that a notation be added to the deed to the RCRA facility property indicating that the property was used to manage remediation wastes. Section 25-15-303(4), C.R.S., requires that all deeds of property used for the disposal of hazardous waste shall contain a deed notation indicating that the property was so used. The amendment to part 264.552(e)(4)(iv) is consistent with, and is intended to satisfy that statutory requirement. Owners/operators of the facilities can use a different deed notation than the one identified in the state analog with the approval of the Department of Health. Such alternative deed notations would seem especially appropriate where the remediation wastes managed at the facility were not hazardous.

The federal rule contained provisions concerning how CAMUs and temporary units would be incorporated into existing permits, part 264.552(g) and part 264.553(f) respectively, but did not indicate how they would be incorporated into new permits or orders. New part 264.552(h) and (i), and new part 264.553(g) and (h) were added to the state analogs to clearly indicate how CAMUs and temporary units will be incorporated into the Department of Health's permitting or order process. Existing part 264.552(h) and part 264.553(g) in the federal rules were relettered (j) an (i) respectively to accommodate the addition of the new parts.

A new sentence was added to the end of Part 265.5 to indicate that corrective action orders issued by the Department of Health under this part or section 25-15-308, C.R.S., may designate or establish a CAMU or temporary unit as provided for in part 264.552 and part 264.553. Since CAMUs and temporary units are available to both permitted and interim status RCRA facilities, but the provisions providing for their establishment are in Part 264 with no corresponding provisions in Part 265, the Hazardous Waste Commission felt it was necessary to include a reference in Part 265.5 to the Part 264 provisions.

Sections 25-15-303 and 25-15-308, C.R.S., require all facilities for the storage, treatment or disposal of hazardous waste in Colorado to obtain a permit from the Department of Health. CAMUs and temporary units for the management of hazardous remediation wastes at existing or newly permitted facilities will be incorporated through the present permitting process in part 100 into the facility permit, and will thereby satisfy the statutory requirement for a permit.

Interim status facilities which do not intend on continuing operation and would not require a permit, except for the management of hazardous remediation waste as part of corrective action at the facility, could also be required to follow this existing permitting process. However, the Hazardous Waste Commission believes that this process was established to review the present and future operation of hazardous waste management facilities, and given its detail and time commitment it is ill suited as a reviewing process for interim status facilities which are simply closing and conducting corrective action, including establishing a CAMU or a temporary unit. The Hazardous Waste Commission believes that, in the context of a closing interim status facility, the designation procedure for CAMUs and the standard establishment procedure for temporary units is a sufficient regulatory review process and that CAMUs and temporary units established pursuant to those procedures should be granted a permit by rule under part 100.21, provided the public has had an opportunity to comment on the establishment of the CAMU or the temporary unit. Therefore, the Hazardous Waste Commission has promulgated a new permit by rule provision to better accommodate these interim status facilities.

Lastly, references in the federal rules adopted by the EPA to other federal regulations or statutes have been replaced in the state analogs adopted by the Hazardous Waste Commission by references to corresponding state regulations or statutes.

Statement of Basis and Purpose – Rule-making Hearing of June 21, 1994

8.11 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 261 and 268; and 6 CCR 1007-2 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

Treatability Studies Sample Exclusion

On February 18, 1994, the Environmental Protection Agency (EPA) issued a final rule which revised the Treatability Studies Sample Exemption Rule. The rule conditionally exempts small scale treatability studies from Subtitle C regulation. The principal change to the existing rule is to increase the quantity of contaminated media which are conditionally exempt from Subtitle C regulation when used in conducting treatability studies. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

Excluding the preamble discussion paragraph C(5) “Treatability Studies at Federal Facilities” on page 8364, this Basis and Purpose incorporates by reference the preamble language for the EPA regulations published in the Federal Register at 59 FR 8362-8366, February 18, 1994.

Renewal of the Hazardous Debris Case-By-Case Capacity Variance

On May 8, 1992, EPA granted a one-year case-by-case capacity variance of the Land Disposal Restrictions (LDR) to persons managing certain hazardous debris (see 57 FR 20766, May 15, 1992). This rule extended, until May 8, 1994, the case-by-case extension for hazardous debris granted by the May 15, 1992 final rule. However, only debris and mixed radioactive/hazardous debris contaminated with wastes listed in 40 CFR § 268.12 and/or any characteristic waste for which treatment standards are established in Subpart D of Part 268 are included in this extension. No further variance or extension of the LDR effective dates for hazardous debris can be given after May 8, 1994. This final rule also amends the case-by-case extension for contaminated soils by clarifying that the extension granted on October 20, 1992 applied only to soils regulated under the Third Third Land Disposal Restriction Rule.

This extension will, by its own terms, have expired before a rule-making hearing can be held on this matter. Colorado has chosen not to adopt this federal regulation, but is instead proposing to amend § 268.35(e) to contain language equivalent to the applicable federal regulations.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 58 FR 28506-28511, May 14, 1993.

Statement of Basis and Purpose – Rule-making Hearing of July 19, 1994

8.12 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 261, 262, 264, 265, 268, and 100 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

Chlorinated Toluenes Production Waste Listings

On October 15, 1992, the Environmental Protection Agency (EPA) amended the regulations for hazardous waste management under the Resource Conservation and Recovery Act (RCRA) by adding three wastes generated during the production of the alpha- (or methyl-) chlorinated toluenes, ring-chlorinated toluenes, benzoyl chlorides, and compounds with mixtures of these functional groups, collectively referred to as "chlorinated toluenes," to the list of hazardous wastes from specific sources. EPA also amended appendix VII of part 261 to add the constituents for which these wastes are being listed. The effect of this regulation is that these three wastes will be subject to regulation as hazardous wastes. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 57 FR 47376-47386, October 15, 1992.

Liquids in Landfills

On November 18, 1992, the Environmental Protection Agency (EPA) promulgated a final rule regarding the landfill disposal of containerized liquids mixed with sorbents. This rule satisfied the statutory requirement that EPA issue a rule that prohibits the disposal in hazardous waste landfills of liquids that have been sorbed in materials that biodegrade or that release liquids when compressed as might occur during routine landfill operations. This rule will help assure the stability of materials in hazardous waste landfills. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency. This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 57 FR 54452-54461, November 18, 1992.

Hazardous Soil Case-by-Case Capacity Variance

On June 1, 1990 (55 FR 22520; Revision Checklist 78), EPA promulgated a final rule establishing prohibitions and treatment standards for Third Third wastes. Because of a lack of treatment capacity, EPA granted a two-year national capacity variance for those hazardous soils whose best demonstrated available technology (BDAT) was incineration, retorting, or vitrification, as well as for soils contaminated with radioactive mixed waste. As such, these wastes were prohibited from land disposal on May 8, 1992, unless the treatment standards were met.

This October 20, 1992 rule provided, under 40 CFR 268.5, a one-year extension of the Land Disposal Restrictions (LDR) effective date for this same set of hazardous waste contaminated soils. This extension has by its own terms expired and is no longer in effect. Colorado has chosen not to adopt this expired federal regulation, but is instead proposing to amend § § 268.35(c), (d), and (e) to contain language equivalent to the applicable federal regulations.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 57 FR 47772-47776, October 20, 1992.

Correction of the Table at § 261.32

These amendments correct the "Organic Chemicals" and "Inorganic Chemicals" subgroups of the table at § 261.32 to arrange the K-waste listings in alpha-numeric order.

Table of Contents Revision

The Table of Contents pages for Parts 260, 261, 262, 264, 265, 268, and 100 are revised and updated to reflect the new regulations that have been adopted by the Hazardous Waste Commission, and to correct any typographical errors or inadvertent omissions in the previous version.

Revision of the tables at § § 261.33(e) and (f)

Sections 261.33(e) and (f) are revised to replace the current photocopy versions of the tables with electronically-formatted versions.

Revision of Appendix VIII of Part 261

Appendix VIII of Part 261 is revised to replace the current photocopy version with an electronically-formatted version. Listings for hazardous constituents "Heptachlorodibenzofurans" and "Heptachlorodibenzo-p-dioxins" are also being added to Appendix VIII at this time. These listings were inadvertently omitted when the other wood preserving amendments of 55 FR 50450-50489, December 6, 1990 were adopted.

Revision of Appendix IV of Part 264

Appendix IV to Part 264 is revised to reformat the current version, and to correct typographical errors and inadvertent omissions which exist in the current version.

Revision of Permits by Rule § 100.21(d) Generator treatment.

At its rule-making hearing of January 18, 1994, the Hazardous Waste Commission adopted a Treatment by Generators rule which allows for the treatment of hazardous waste by generators in tanks or containers and allows for the Division to apply additional standards to ensure protection of health and the environment on a case-by-case basis.

In an effort to promote clarity in the permit-by-rule provision for generator treatment, Section 100.21(d)(2) is being revised at this time to delete; "and such that the waste is still hazardous after treatment;"

Statement of Basis and Purpose - Rule-making Hearing of August 16, 1994

8.13 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 261, 262, 264, 265, 266 and 100, and the addition of Part 279 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

Identification and Listing of Hazardous Waste: Used Oil Filter Exclusion

On May 20, 1992, the Environmental Protection Agency (EPA) promulgated a final listing decision (57 FR 21524) for used oils based upon the technical criteria provided in the Resource Conservation and Recovery Act (RCRA) sections 1004 and 3001 and in 40 CFR 261.11(a)(1) and (a)(3). EPA decided not to list used oils destined for disposal as hazardous waste based on the finding that all used oils do not typically meet the technical criteria for listing a waste as hazardous waste. This rule preserves the status quo for used oil destined for disposal and exempts, from the definition of hazardous waste, certain types of used oil filters that have been drained. Because these proposed regulations narrow the scope of the Toxicity Characteristic (TC) rule promulgated pursuant to HSWA authority, as well as the characteristics of EP toxicity regulations promulgated under non-HSWA authority, these regulations are less stringent than the current regulations, and Colorado is not required to adopt this rule. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 57 FR 21524-21534, May 20, 1992, and as amended at 57 FR 29220, July 1, 1992.

Identification and Listing of Hazardous Waste Recycled Used Oil Management Standards

On September 10, 1992, the Environmental Agency (EPA) promulgated a final listing decision for used oils that are recycled, and also promulgated standards for the management of used oil under RCRA section 3014. EPA made a final listing decision for used oils that are recycled based upon the technical criteria provided in sections 1004 and 3001 of RCRA. EPA determined that recycled used oil does not have to be listed as a hazardous waste since the used oil management standards issued in this rulemaking are adequately protective of human health and the environment. These standards cover used oil generators, transporters, processors and re-refiners, burners, and marketers. The amendments adopted by the Commission mirror these regulatory changes made by EPA.

For clarification purposes, the Commission has adopted an additional provision to these regulations. This amendment (the addition of paragraph (ii) to § 279.10(b)(2)) indicates that the mixing of used oil and a characteristic hazardous waste for the purpose of managing the resulting mixture as a used oil constitutes treatment of hazardous waste and requires compliance with part 100 of the state hazardous waste regulations.

A number of parties at the hearing presented testimony to the Commission in support of changing the noticed rule to allow the use of used oil as a dust suppressant. Used oil historically has been used primarily by rural communities as a dust suppressant for roads because it is effective and relatively inexpensive. Representatives from the Hazardous Materials and Waste Management Division, the Air Pollution Control Division, and the Water Quality Control Division testified regarding how the use of used oil as a dust suppressant would potentially affect their programs, and a representative from EPA testified on the current federal requirements prohibiting the use of used oil as a dust suppressant, the ability of states to petition EPA for a variance from such prohibition, and EPA's willingness to work with the State and interested persons to pursue a variance, or other alternatives.

The Commission understands the desire and need of local communities to find an economical and efficient means of controlling dust on their roads. The Commission, however, declines to change this regulation to allow the use of used oil for dust suppression because of its concern over the potential adverse human health and environmental impacts of such use, and the absence of sufficient evidence in the record on such impacts. The Commission also recognizes that EPA regulations prohibit the use of used oil as a dust suppressant, and provide a means through which states may petition EPA for the authority to use used oil as a dust suppressant. The Commission encourages those persons interested in using used oil as a dust suppressant to work with representatives from EPA and the Department of Public Health and the Environment either to prepare such a petition to EPA, or to determine alternative means to control dust.

This Basis and Purpose incorporates by reference the preamble language for the EPA regulations published in the Federal Register at 57 FR 41566-41626, September 10, 1992, and as amended at 58 FR 26420-26426, May 3, 1993; 58 FR 33341-33342, June 17, 1993; and 59 FR 10550-10560, March 4, 1994.

Corrections to the Wood Preserving Regulations

These amendments correct errors which occurred when the Wood Preserving regulations of 57 FR 61492-61505, December 24, 1992 were adopted by Colorado. These regulations are being revised at this time to: remove the last sentence of paragraph (b), as well as subparagraphs (b)(1),(2), and (3) of § § 264.571 and 265.441; and to remove the effective date note paragraphs following § § 265.443(o), 265.444(b)(3), and 265.445(c)(2).

Correction of Typographical Errors and Inadvertent Omissions

In addition these amendments also correct typographical errors and inadvertent omissions that occur in the regulations.

Statement of Basis and Purpose - Rule-making Hearing of January 17, 1995

8.14 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 261, 262, 263, 264, 265, 266, 267, 268, 2, and 100 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), CR.S.

Land Disposal Restrictions Phase II - Universal Treatment Standards, and Treatment Standards for Organic Toxicity Characteristic Wastes and Newly Listed Wastes

On September 19, 1994, the Environmental Protection Agency (EPA) promulgated a final rule establishing treatment standards for the newly identified organic toxicity characteristic (TC) wastes (D018-D043 wastes) (except those managed in Clean Water Act (CWA) systems, CWA-equivalent systems, or Class I Safe Drinking Water ACT (SDWA) injection wells), and for all newly listed coke by-product and chlorotoluene production wastes. The required treatment standards for these wastes must be met before they are land disposed. These final federal rules also require ignitable characteristic wastes (D001 wastes) with a high total organic carbon (TOC) content and toxic characteristic pesticide wastes (D012-D017 wastes), that are being disposed in Class I nonhazardous waste injection wells, to either be injected into a well that is subject to a no-migration determination, or be treated by the designated LDR treatment method. The Hazardous Waste Commission is not adopting the revisions made to § 268.1(c)(3) by this final federal rule. In the federal regulations, 40 CFR § 268.1(c)(3) provides for an exception to the land disposal restrictions if hazardous wastes are disposed of in injection wells. Colorado rules prohibit Class I injection wells. Because the state analogs do not provide for the injection well exception to land disposal restrictions, Colorado's requirements are more stringent than the applicable federal regulations. Promulgation of these treatment standards for the newly identified and listed wastes and promulgation of the dilution prohibitions for high TOC ignitables and pesticides fulfills requirements of a proposed consent decree between EPA and the Environmental Defense Fund, and a settlement agreement between EPA, the Hazardous Waste Treatment Council, and a number of environmental groups including the Natural Resources Defense Council.

The Hazardous Waste Commission is also not adopting the revisions made to 40 CFR Part 266, Subpart H, “Hazardous Waste Burned in Boilers and Industrial Furnaces”. These final federal rules revise 40 CFR § 266.100, and add Appendix XIII to Part 266 Colorado has not adopted a state analog to 40 CFR Part 266, Subpart H at this time.

These final federal rules make a major improvement in the Land Disposal Restrictions program in order to simplify and provide consistency in the requirements. These amendments establish a consolidated table of treatment standards, referred to as universal treatment standards, to replace the existing system of three separate tables at § § 268.41 through 268.43.

The hazardous waste recycling regulations are modified by this final rule to allow environmentally beneficial recycling operations to continue without the regulatory impediments imposed by full RCRA Subtitle C requirements. These modifications broaden the § 261.2(e)(1)(iii) “closed-loop” recycling exclusion from the definition of solid waste such that the residues of a secondary process are excluded from being a solid waste if they are reinserted into the process without prior reclamation (and also similarly broaden the related § 260.30(b) variance for materials that are reclaimed prior to reinsertion). These provisions will put secondary recovery operations that recycle residues on the same regulatory footing as primary recovery operations.

At this time, the Hazardous Waste Commission is also adopting those amendments of the May 24, 1993 interim final rule (58 FR 29860-29887) which have not been revised by the September 19, 1994 final rule. These amendments include the addition of § 268.37, and the revision of B(1) in Appendix I of Part 100.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 59 FR 47982-48110, September 19, 1994; and as amended at 60 FR 242-302, January 3, 1995.

Identification and Listing of Hazardous Wastes: Wastes from Wood Surface Protection

On January 4, 1994, the Environmental Protection Agency (EPA) issued a final hazardous waste listing determination for wastes generated from the use of chlorophenolic formulations in wood surface protection processes. Upon reviewing the public comments received on its proposal of April 27, 1993, EPA determined that listing chlorophenolic wastes from wood surface protection operations was unnecessary and would not yield the benefits intended by a hazardous waste listing under the RCRA program. As a result of this determination, EPA did not mandate in the January 4, 1994 rule any specific operating or information collection requirements for owners/operators of wood surface protection plants.

Although this final rule did not list any wastes from wood surface protection processes as hazardous, EPA believes that certain constituents contained in these wastes warrant inclusion in Appendix VIII of Part 261. This final rule amends the hazardous waste regulations by adding the sodium and potassium salts of pentachlorophenol and tetrachlorophenol to Appendix VIII of Part 261. This rule also finalizes the proposed amendment of SW-846 (“Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”) to include Method 4010 (Immunoassay Test for the Presence of Pentachlorophenol). A June 2, 1994 notice corrects the inaccurate references in the January 4, 1994 final rule to the EPA publication SW-846, “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”. These amendments provides state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 59 FR 458-469, January 4, 1994, and amended at 59 FR 28484, June 2, 1994.

Financial Assurance: Letter of Credit

On June 10, 1994, the Environmental Protection Agency (EPA) issued a final rule amending the regulations related to financial assurance promulgated under Subtitles C and I of the Resource Conservation and Recovery Act (RCRA). Those regulations cite the “Uniform Customs and Practice for Documentary Credits,” published by the International Chamber of Commerce. This notice inserts the words “and copyrighted” into the letter of credit instrument (found at § 266.18(e) and (l) in the Colorado Hazardous Waste Regulations, 6 CCR 1007-3) to clarify that the International Chamber of Commerce publication is copyrighted material. As a result of this notice, owners and operators using the letter of credit instrument to demonstrate financial assurance must include this additional language. This amendment provides state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 59 FR 29958-29960, June 10, 1994.

Amendment to Change “Colorado Department of Health” to “Colorado Department of Public Health and Environment”

Effective July 1, 1994 the Colorado Department of Health changed its name to the Colorado Department of Public Health and Environment. These amendments to the Colorado Hazardous Waste Regulations, 6 CCR 1007-3, Parts 260, 261, 262, 263, 264, 265, 266, and 2 are made to reflect this name change.

Revision of Additional Reports Requirements of § 264.77 and 265.77.

These amendments add new provisions 264.77(d) and 265.77(e) which require the owner/operator of a treatment, storage, or disposal facility to submit annual report information to the Department for the purpose of assessing facility annual fees in accordance with § 100.31 of the Colorado Hazardous Waste Regulations.

Correction of Typographical Errors and Omissions

In addition these amendments also correct typographical errors and inadvertent omissions that occur in the current regulations.

Statement of Basis and Purpose – Rule-making Hearing of February 21, 1995

8.15 Basis and Purpose.

These amendments to 6 CCR 1007-3, sections 261.35(b)(2)(iii) and 264.190(a) are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S. and pursuant to the emergency rule provisions in § 24-4-103(6), C.R.S.

Analytical Requirements of Equipment Cleaning and Tank System Exemption

In October of 1993 the Office of Legislative Legal Services ("OLLS") challenged these rules and others on the basis that the rules incorporated materials by reference improperly. Specifically, the OLLS stated that EPA Publication SW-846, Test Methods for Evaluating Solid Waste Physical/Chemical Methods" ("SW-846") was not within the class of documents that could be incorporated by reference under the Colorado Administrative Procedures Act. Senate Bill 69, also known as the "Rule Bill", had set these rules for expiration on November 1, 1994. While an amendment was made to the Rule Bill which allowed for the extension of the other challenged rules, that amendment did not include § § 261.35(b)(2)(iii) and 264.190(a).

During the 1993-94 legislative session a bill which would allow for the incorporation by reference of SW-846 was passed (Senate Bill 151). These proposed rules are identical to the previous rules which expired on November 1, 1994. Section 261.35(b)(2)(iii), which concerns analytical requirements of equipment cleaning, and Section 264.190(a), concerning an exemption from the requirements of §264.193 for tank systems that contain no free liquids and are situated inside a building with an impermeable floor, are imperatively necessary for the continued authorization of Colorado's hazardous waste control program from the Environmental Protection Agency. The rules are also necessary for continued compliance with the Resource Conservation and Recovery Act. Because of the imperative need for the reinstatement of these requirements, the proposed rules are being adopted as emergency rules as provided in § 24-4-103(6), C.R.S. A permanent rule-making hearing for the rules will be held on February 21, 1995. Today's proposal provides state equivalency with the regulatory requirements of the Environmental Protection Agency.

Statement of Basis and Purpose – Rule-making Hearing of February 21, 1995

8.16 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 261, 264, 265, and 266 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

Correction of Typographical Errors and Inadvertent Omissions

These amendments correct typographical errors that occur in § § 264.1031, 265.192(a)(5)(ii), 265.1031, 266.16(g)(1); and in paragraph 8.2.2 of Part 261, Appendix II of the current regulations.

Analytical Requirements of Equipment Cleaning and Tank System Exemption

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Statement of Basis and Purpose – Rule-making Hearing of April 18, 1995

8.17 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 261, 262, 264, 265, 266, 267, 268, and 100 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

Organic Air Emission Standards for Tanks Surface Impoundments and Containers.

In a December 6, 1994 final rule (59 FR 62896-62953), the Environmental Protection Agency (EPA) promulgated Subpart CC air standards that apply to owners and operators of hazardous waste treatment, storage, and disposal facilities (TSDF) subject to RCRA subtitle C permitting requirements and to certain hazardous waste generators accumulating waste on-site in RCRA permit-exempt tanks and containers. [**Note:** Generators accumulating hazardous waste at a satellite accumulation area do not need to comply with the Subpart CC air emission standards; however, generators accumulating hazardous waste at a 90 day storage area must comply with the Subpart CC air standards]. In addition, this action also established a new EPA reference test method (Method 25E) to determine the organic vapor pressure of a waste. These amendments provide equivalency with the regulatory requirements of EPA.

The Hazardous Waste Commission also made additional changes when adopting this rule. These additional changes include:

1) Requiring that the air emission controls must be used for tanks, surface impoundments, and containers in which hazardous waste is placed on or after December 6, 1995 except under certain conditions specified for TSDF miscellaneous units. [Note: The Hazardous Waste Commission adopted the Subpart CC standards with an effective date of December 6, 1995 rather than the June 5, 1995 effective date that is listed in the 12/6/94 final rule. The December 6, 1995 effective date was adopted to correspond with EPA's stated intention to grant an extension to the effective date of the Subpart CC Air Emission Standards until 12/6/95. A final notice of EPA's extension of the effective date is expected to be published in a May, 1995 Federal Register].

2) Adding the additional clarifying language of "(approximately 26 gallons)" in § § 264.1080(b)(2) and 265.1080(b)(2).

3) Adding the additional clarifying language of "volatile organic" in § § 264.1082(c)(1) and 265.1083(c)(1).

4) Adding the additional clarifying language of "(approximately 119 gallons)" in § § 264.1086(b)(3) and 265.1087(b)(3).

5) Revising § 262.34(c)(1) by adding",except for § 265.178;" at the end of paragraph (i) to clarify that generators accumulating hazardous waste at a satellite accumulation area do not need to comply with the Subpart CC air emission standards.

6) Revising § 263.10 by adding a new paragraph (d) cross-referencing the Part 265, Subpart CC standards which establish specific requirements for containers (including railcars, tank cars, and roll-off boxes) of organic-containing hazardous waste transported from a treatment, storage, and disposal facility.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 59 FR 62896-62953, December 6, 1994.

Testing and Monitoring Activities

In a January 13, 1995 final rule, the Environmental Protection Agency amended its hazardous waste regulations for testing and monitoring activities. The 1/13/95 final rule added new and revised methods as Update II to the Third Edition of the EPA-approved test methods manual "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846. It also incorporated the SW-846 Third Edition, as amended by Updates I (promulgated August 31, 1993), II, and IIA (promulgated January 4, 1994 as part of the wood surface protection rule) into § 260.11(a) for use in complying with the requirements of subtitle C of RCRA. The intent of this amendment is to provide better and more complete analytical technologies for RCRA-related testing and thus promote cost-effectiveness and flexibility in choosing analytical test methods. This amendment to § 260.11(a) provides state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 60 FR 3089-3095, January 13, 1995.

Testing and Monitoring Activities

On August 31, 1993, the Environmental Agency (EPA) amended its hazardous waste regulations under subtitle C of the Resource Conservation and Recovery Act (RCRA) of 1976, as amended, for testing and monitoring activities.

The Commission is not adopting the revisions made to § § 260.11(a), 268.7(a), 268.40(a), and 268.41(a) by this August 31, 1993 final rule (58 FR 46040-46051). These sections were amended by the Universal Treatment Standards final rule (59 FR 47982-48110, September 19, 1994), and the corresponding state analogs have already been revised to provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

The Commission is also not adopting the revisions made to 40 CFR § 270.66, "Permits for boilers and industrial furnaces burning hazardous waste." Colorado has not adopted a state analog to 40 CFR § 270.66 at this time.

The amendments being adopted at this time include:

1) Revising § § 260.22(d)(1)(i) and 100.41(b)(5)(iii)A)(3) to reference SW-846 instead of Appendix III of Part 261.

2) Deleting references to equivalent methods in § § 261.22(a)(1) and (2) and 261.24(a).

3) Deleting the reference to Method 5.2 in § 261.22(a)(1) and adding in its place the reference to SW-846 Method 9040.

4) Revising Appendix II of Part 261 by deleting the Toxicity Characteristic Leaching Procedure (TCLP), and adding reference to the TCLP, SW-846 Method 1311 to appendix II and § 261.24.

5) Revising Appendix III of Part 261 whereby Tables 1 through 3 are removed and a note is added referencing the reader to SW-846.

6) Deleting Appendix X of Part 261.

7) Revising Appendices I and IX of Part 268 by deleting the reference to the TCLP found in Appendix II, Part 261 from Appendix I of Part 268 and deleting the EP Toxicity Test Method 1310 from Appendix IX of Part 268 and adding notes respectively referencing the TCLP, Method 1311 and the EP, Method 1310 found in SW-846.

8) Adding clarification that references to SW-846 in § § 264.190(a), 264.314(d), 265.190(a), 265.314(d), 100.41(b)(5)(iii)(A)(3) and (4), and 100.22(c)(2)(ii)(A)(3) and (4) are to SW-846 as incorporated by reference in § 260.11.

9) Revising § 100.47 to cross-reference § 260.11.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 58 FR 46040-46051, August 31, 1993.

Amendments to Definition of Solid Waste

On July 28, 1994, the Environmental Protection Agency (EPA) excluded from the RCRA regulatory definition of solid waste certain in-process recycled secondary materials utilized by the petroleum refining industry. Specifically, the July 28, 1994 final rule stated that oil recovered from petroleum refinery wastewaters and from other sources, both on-site and off-site, is excluded from the regulatory definition of solid waste if it is subsequently inserted (along with normal process streams) into the petroleum refining process prior to crude distillation or catalytic cracking. These amendments to § § 261.3, 261.4, and 261.6 provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

The Hazardous Waste Commission (Commission) is not adopting the revisions made to 40 CFR § 266.100 by this final rule. Colorado has not adopted a state analog to 40 CFR § 266.100 at this time.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 59 FR 38536-38545, July 28, 1994.

Recordkeeping Instructions

On March 24, 1994, the Environmental Protection Agency (EPA) amended the recordkeeping instructions in order to match those unit of measurement codes and handling codes used by hazardous waste treatment, storage, and disposal facilities to report to EPA on the Part A Permit Application Form with the codes used to maintain records on-site by these facilities. This technical amendment also added additional handling codes to allow for the proper recording of those processes relating to Boilers and Industrial Furnaces and Miscellaneous Units (subpart X) facilities. These amendments to Appendix I to Part 264 and Part 265 provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 59 FR 13891-13893, March 24, 1994.

Correction of Listing of P015 - Beryllium Powder

These amendments correct the P015 listing description for “beryllium” in § 261.33 and Appendix VIII of Part 261 to read “Beryllium powder”.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 59 FR 31551, June 20, 1994.

Revision of § 264.100(e)

These amendments add subparagraphs (3) and (4) to § 264.100(e). These amendments were previously adopted in Colorado as § 264.100(e)(1) and (2), but were inadvertently deleted rather than redesignated as subparagraphs (e)(3) and (4) when § 264.100 was revised as part of a December 1, 1987 final rule (52 FR 45788-45799). This December 1, 1987 final rule amended § 264.100 by redesignating paragraph (e)(1) and (2) as (e)(3) and (4), and by adding new paragraphs (e)(1) and (2). These amendments provide equivalency with the regulatory requirements of the Environmental Protection Agency.

Revision of the table at § 261.31(a)

Section 261.31(a) is revised to replace the current version of the table with a reformatted version; to correct the inadvertent omission of text in the F003 listing; and to correct any other typographical errors which exist in the current version.

Revision of the table at § 261.32

Section 261.32 is revised to replace the current version of the table with a reformatted version.

Revision of the Part 262 Statement of Basis and Purpose

These amendments revise the “Pre-Transport Requirements” section of the Part 262 Statement of Basis and Purpose by revising the last sentence of the first paragraph, and by deleting the last paragraph on page 168 of the current regulations. The 90-day extension in the first paragraph is corrected to a 30-day extension to correspond with current State and EPA regulations. The last paragraph on page 168 is deleted because the State regulations no longer have a § 100.21(a) permit-by-rule provision for extended storage of hazardous waste by generators.

Revision of § 261.6(a)(3)

These amendments revise § 261.6(a)(3) by replacing the references to § 267.40(e) with the proper reference citation of § 279.11 as the correct location of the used oil specifications.

Correction of Typographical Errors and Omissions

In addition these amendments also correct typographical errors and inadvertent omissions that occur in the current regulations.

STATEMENT OF BASIS AND PURPOSE – AMENDED REGULATIONS FOR INCINERATION OF HAZARDOUS WASTE – Rule Making Hearings of October 18, 1994, November 15, 1994, January 17, 1995, February 21, 1995, April 18, 1995, and May 16, 1995.

8.18 Basis and Purpose

These amendments to 6 CCR 1007-3, Parts 260, 264, and 100 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S. These amendments revise and finalize technical and procedural standards related to permitting and operation of hazardous waste incinerators. The amendments strengthen the requirements for burning hazardous wastes in these devices, and are responsive to a number of issues identified by the Governor's Hazardous Waste Incineration Advisory Committee, the Governor's Committee on Hazardous Waste Regulation, the Colorado Department of Public Health and Environment, federal, state and local officials, and concerns expressed by the public regarding this activity over the past several years.

The Commission acknowledges that not all issues related to hazardous waste incineration identified by the interested parties were resolved through this rule-making. Legislative action may be the most appropriate mechanism to address issues that lie outside the authority currently provided under the Colorado Hazardous Waste Act (CHWA). The issues of concern to the Commission, some of which were also identified in the Advisory Committee Report (reference #2 below), include: promulgation of air toxics standards through the Air Quality Control Commission; an operator certification program for hazardous waste incinerator operators; provide clear authority to the Department to deny permit applications based on an applicant's compliance history; technical assistance grants to local communities for review of incineration projects; and mandatory reductions in waste generation by industry.

In order to address deficiencies which had been identified in the existing regulatory framework for hazardous waste incineration, the Commission requested that the Department's Hazardous Materials and Waste Management Division (the Division) prepare draft revisions to the existing State hazardous waste incineration regulations, Part 264-Subpart O, and applicable sections of Part 100. In general, these revisions include the expanded performance-related standards' specified in the federal Boiler and Industrial Furnace (BIF) rule, 40 CFR Part 266-Subpart H. However, a great deal of implementation guidance, research, and policy documents have been developed by the U.S. Environmental Protection Agency (EPA) since the BIF Rule was promulgated. These sources of information were used in conjunction with the BIF Rule to prepare these amendments. The Commission has adopted appropriate sections of the BIF Rule, and incorporated current national guidance, policy and practice to develop hazardous waste incinerator rules with enforceable standards which ensure protection of public health and the environment. The CHWA provides authority for rules which are more protective than EPA's rules, and this document identifies the basis for any such changes to the existing regulations through this rulemaking. In addition to any existing rules, the authority for the Department to require more stringent permit conditions in order to protect human health and the environment exists in the “omnibus” provision of 6 CCR 1007-3, §100.43(a)(2). These amendments ensure that Colorado is at least as stringent as the U.S. Environmental Protection Agency regulations, and are more stringent in a number of areas.

The Department submitted a proposed rulemaking to the Hazardous Waste Commission as draft language for discussion, dated July 27, 1994, which were noticed in the Colorado Register in August 1994. The Commission conducted the rulemaking hearings as a formal rulemaking process. There were initially three parties to the rulemaking: the Division, the U.S. Environmental Protection Agency (Region VIII), and the Sierra Club, a national environmental organization. The first hearing was held in Avondale, Colorado on October 18, 1994. The EPA subsequently dropped its formal party status, and submitted written testimony to the Division in support of the proposed amendments.

These proposed regulations do not address permitting, operation, or combustion of hazardous waste in boilers and industrial furnaces. Operation of these devices is regulated in Colorado by the U.S. Environmental Protection Agency under 40 CFR Part 266 - Subpart H.

STATUS OF HAZARDOUS WASTE INCINERATION IN COLORADO and EFFECT OF AMENDMENTS

One existing facility (ECOVA Corp, formerly Waste-Tech Services, Inc.) is permitted in Colorado to operate a research scale fluidized bed incinerator. This facility operates infrequently, and is not used for commercial destruction of waste. The Department will review information such as emissions and operating conditions regarding this facility to determine if permit modifications are necessary to protect human health and the environment as a result of these amendments. One facility (the U.S. Army-Pueblo Depot Activity) is seeking a permit to construct a hazardous waste incineration facility for the destruction of obsolete chemical munitions stored at the Depot. The permit application was submitted in June 1992, and is under review by the Department. Construction of this facility cannot begin until the Army has received a final State RCRA permit issued by the Department and a Certificate of Designation (CD) from Pueblo county. The U.S. Congress must also continue its approval and funding of the project. These amendments will, to some degree, affect this facility's application requirements and subsequent operating requirements, if a permit is issued. Since these amended regulations are generally consistent with EPA's national policy, the Army is aware of many of these new requirements, and is addressing the same or similar issues at other Chemical Demilitarization program sites, such as Tooele, Utah and Anniston, Alabama.

The Army operates a submerged quench incinerator (SQI) at the Rocky Mountain Arsenal (RMA) for destruction of wastes from clean-up activities at Basin F, a former waste disposal site. The Army was not required to pursue a State RCRA permit as it was approved under a four party agreement as a CERCLA Interim Response Action (IRA), for which EPA was lead regulatory Agency. The State of Colorado reviewed the project for compliance with the technical requirements of RCRA, such as 40 CFR Part 264, Subpart O, under a CERCLA “ARAR” process. The SQI was constructed by Army contractors, operated by Army contractors under applicable requirements, and regulatory oversight is provided by the Department and EPA. It is not expected that these amended regulations will significantly affect operation of this facility, since a thorough site specific risk assessment, very similar to that required by these amendments, was conducted and emissions from the SQI met acceptable target levels. In addition, the SQI will not operate for an extended period of time. Its mission, which began in mid-1993, is to treat a specific volume of on-site wastes and is nearly complete.

REFERENCES

A number of sources were utilized in preparing these amendments to regulations for hazardous waste incineration. The following list contains the major sources of information on which the amendments are based, and these documents are available at the Division's records center for review upon request:

1. Boiler and Industrial Furnaces Rule-40 CFR 266-Subpart H (56 FR 7134, Feb. 21, 1991);

2. Recommendations of the Governor's Hazardous Waste Incineration Advisory Committee (11/91);

3. The Department's report to Governor Romer on hazardous waste incineration (11/5/91.);

4.

a) EPA's Draft Combustion Strategy (DCS) (May 1993);

b) EPA's Strategy for Hazardous Minimization and Combustion (November 1994);

5. Report of Committee on Hazardous Waste Regulation on the Boiler and Industrial Furnaces Rule-7/30/92;

6. Division memos to the Committee on Hazardous Waste Regulation dated April 20, 1992 and May 27, 1992;

7. Hearing and meeting record of the Committee on Hazardous Waste Regulation (February 1991 through July 1992);

8. New Source Performance Standards (NSPS) for Municipal Waste Combustors; Colorado Air Regulations No. 6.Part A, Subpart E(a) and Part B; 40 CFR 60-Subpart E(a);

9. Materials provided as exhibits to the Division's preheating statement of September 8, 1994;

10. “Combustion Emissions Technical Resource Document” (CETRED), EPA530-R-94-014FINAL (May 1994);

11. “Municipal Waste Combustion Assessment: Technical Basis for Good Combustion Practice” ; EPA-600/8-89-063; (August 1989);

12. Proposed federal regulations for enhanced public participation at RCRA facilities. (June 2, 1994);

13. Proposed federal regulations for NSPS for municipal waste combustors (59 FR 48198, September 20, 1994).

14. The Commission's Rulemaking Hearing Record for rulemaking hearings of October 18, 1994, November 15, 1994, January 17, 1995, February 21, 1995, April 18, 1995, and May 16, 1995, including: Pre-hearing submittals and testimony of the parties to the hearings, and hearing minutes.

15. 40 CFR Part 761-Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and use Prohibitions, Subpart D-Storage and Disposal (40 CFR 761.65(d)(3));.

AMENDMENTS

Each significant amendment to the existing regulations for hazardous waste incineration is listed in the following sections. A brief description of the revision, the basis for the revision, and a discussion of the background and purpose of the revision is provided.

THE FOLLOWING REVISIONS ARE INCORPORATED INTO 6 CCR 1007-3. PART 100

(1) REVISION: Addition of Pre- and Post- Trial Burn Risk Assessment requirements to application process (§ §100.22(c)(5) and (6)): These amendments require that facilities which submit an application to operate a hazardous waste incineration (HWL) facility provide a two phase assessment of risk for stack emissions from the facility.

BASIS: References # 4, 5, 6, 9.

DISCUSSION: The EPA has implemented the use of pre- and post-trial burn risk assessments at combustion facilities as national policy through its combustion strategy, and many state regulatory agencies are following this strategy. Under these amendments, a two phase process to implement such a strategy has been codified. Phase I is a pre-trial burn multi-pathway health risk assessment (MPHRA), conducted on the estimated emissions from the facility operation. Air dispersion modeling must be conducted by the applicant to estimate the ambient concentrations of hazardous constituents due to facility emissions. This phase projects whether emissions from the facility operation as proposed would exceed health risk based levels in the ambient environment, and identifies the location of highest estimated concentrations. Phase I serves as a screening tool to identify whether risk based performance standards of Part 264-Subpart O are met based on design estimates of emissions, using conservative screening protocols, and identifies where site specific air dispersion modeling and risk assessment procedures are needed. Alternatively, the facility could conduct a thorough site specific risk assessment in Phase I using the best emissions estimates available.

The second phase is a site specific post-trial burn MPHRA conducted on the measured emissions from the facility after permitting and construction, during interim operations. Phase II utilizes measured emissions from the facility operation obtained during the trial burn to assess whether health risk based performance standards will be exceeded in the ambient environment. Both Phase I and II require that the applicant utilize air dispersion models approved by the Department, and a risk assessment methodology subject to the Department's approval as part of the application. Both phases include an assessment of both direct inhalation and indirect health risk through deposition of constituents in the environment and uptake through media, such as surface water, and through ingestion of locally grown plant and animal matter. The exposure scenarios and toxicological data consider sensitive subpopulations such as children in the risk assessment process.

The risk assessment methodology in these amendments requires summation of carcinogenic risk across all major exposure pathways, for all identified compounds, resulting in a cumulative risk from operation of the hazardous waste incineration facility. (In contrast, the procedure in the BIF rule handled carcinogenic risk from metals and dioxins and furans separately.) In addition, a target risk level of one in a million (1 E-6) added lifetime cancer risk (ALCR), also referred to as “increased lifetime cancer risk”, has been established for the hypothetical “most exposed individual” (MEI) due to facility emissions. In contrast, the federal BIF rule uses 1 in 100,000 (1 E-5), a target risk level which the Department does not currently accept as an initial target level for protection of human health as a policy matter in its Hazardous Waste Control Program. This revision is otherwise consistent with the combustion strategy, and reflects current practice of EPA and many states conducting risk assessments at hazardous waste combustion facilities.

The MEI is the hypothetical person at a site determined through air dispersion modelling as the location of highest average ground level ambient concentration of the constituents of concern, and therefore the location of high-end potential individual health risk, regardless of whether anyone lives or works at this location. The dispersion modelling identifies whether the MEI is located on-site or off-site, which in turn affects the exposure scenario(s) and risk management alternatives. This combination of estimated exposure levels and location may also be referred to as the location of “reasonable maximum exposure” (RME).

The Commission recognizes that risk assessment and management is an evolving science as well as a policy matter. These amendments require that facilities utilize risk assessment methodology and procedures approved by the Department. If advances in the science or site specific considerations dictate changes to the assessment procedures, these must be implemented and documented in the administrative record for a permit decision. For a given site, there may be a spectrum of ways to conduct a risk assessment for a situation as complicated as a HWI facility, some being more comprehensive than others. Available published guidance documents may be utilized as necessary to determine the most appropriate methodology and protocols for conducting risk assessments. For example, the documents "Revised Draft of Risk Assessment Implementation Guidance for Hazardous Waste Combustion Facilities" (EPA, OSW, April 22, 1994, and referred to as the Implementation Guidance), "Methodology for Assessing Health Risks Associated with Indirect Exposure to Combustor Emissions" (EPA/600/6-90/003; ORD 1990 and referred to as the Indirect Exposure Document), and the "Draft Addendum" (EPA 1993) to that document, provide valuable information in preparation of indirect risk assessments. It is recommended that the applicant work closely with the Department in designing the Phase I and II risk assessments.

There may be cases where ecological receptors are more sensitive than humans. If the information obtained during the Phase I and II MPHRAs indicates that an evaluation of risk to ecological receptors is needed, or would be beneficial in determining appropriate and environmentally protective permit conditions, the Director may require the applicant/permittee (as appropriate) to perform an ecological risk assessment. An ecological risk assessment, if required, will be conducted in accordance with procedures and methodologies approved by the Director to ensure protection of human health and the environment.

(2) REVISION: Comparison of measured rates of emissions of Appendix VIII compounds to performance standards (e.g., RACs and RSDs) in estimated emissions and trial burn results (§ 100.22(c)(7)). These amendments require that facilities which submit an application to operate a HWI facility perform a comparison of estimated (pre-trial burn) and measured (post-trial burn) emissions with the published Reference Air Concentration (RACs) and Risk Specific Dose (RSDs) for each compound.

BASIS: References # 1, 4, 6.

DISCUSSION: These amendments have been added for several technical reasons: (a) to evaluate if health-risk based levels of Appendix VIII compounds are exceeded in the ambient air for a hypothetical high end exposure scenario (similar to worst case MEI); (b) to determine if a facility may pursue interim operations during preparation and evaluation of a site specific risk assessment; and (c) to serve as a check on the risk assessment results. Under the existing Subpart O regulations and the federal BIF rule, facilities are not specifically required to perform a comparison of ambient levels of organic compounds detected in the stack emissions during the trial burn with the RACs and RSDs of Appendix IV and V to determine if health based emissions levels have been exceeded for these compounds. Conformance with the destruction and remove efficiency (DRE) standard for POHCs is the only explicit standard for organic compounds. These amendments provide an additional level of specificity and protection not contained in existing Subpart O or the federal BIF rule, and provides a more enforceable method to evaluate compliance with performance standards. A more detailed discussion on specific performance standards is provided later in this document addressing amendments to Part 264-Subpart O.

(3) REVISION: Notification of intent to submit a Part B permit application (§ 100.41(b)(5)): These amendments add a requirement that the facility publish a notification in a major local newspaper which identifies that an application will be submitted for a HWI facility. Criteria for the notification is specified in the amendments.

BASIS: References # 4, 12

DISCUSSION: Based on testimony provided to the Commission, public participation and community involvement were identified as key elements in an effective approach to managing HWI and combustion projects. EPA policy clearly points to public participation as an important aspect of the combustion strategy. These amendments require that the applicant of a proposed HWI facility notify the community that a permit application will be submitted to the Department. In the past, the Department has issued a press release and handled inquiries regarding an application upon submittal. Requiring the facility to initiate the notification would ensure timely notification of the public, and would place more responsibility on the applicant for handling community involvement issues.

(4) REVISION: Notification of Receipt of a permit application and opening of public comment period on an application § 100.506): These amendments require that the Department publish a notification of submission of an application in a major local newspaper, and requires the Department to open a public comment period during the application stage, prior to the Department's final approval of the trial burn plan and prior to issuance of a notice of completeness or a draft permit. A requirement to establish an information repository has been added in order to ensure that all major documents relevant to the project are available for review near the local community.

BASIS: References # 4, 14.

DISCUSSION: Under the Colorado hazardous waste regulations and federal RCRA regulations, the only formal public comment period is held upon issuance of a draft permit decision by the Department. Although nothing prevents any member of the public from commenting on a pending application, the Department's experience is that it is rarely done. In fact, the Department appreciates any relevant information that can be provided prior to the preparation of a draft permit decision. These amendments explicitly require the Director to solicit comments on the application prior to the issuance of a notice of completeness on the application or the formal comment period on a draft permitting decision. In particular, the Department encourages comments on the trial burn plan and Phase I risk assessment prior to final approval, as these are key documents related to the operation of the proposed facility. These amendments also require that the Department publish a notice at the time that the trial burn plan has been approved and dates for conducting the trial burn. Additional public participation will be handled under a community involvement plan (see amendment # 5 of this section), and will include informational meetings focused on particular issues related to the application under review. Addition of the application phase comment period results in the following three distinct comment periods:

1. Application stage, including trial burn and Phase I risk assessment (New requirement.)

2. Draft permit issuance (or denial) stage. (Existing requirement.)

3. Final permit modification stage, to incorporate trial burn results and Phase II risk assessment information. (Revision to existing requirement; see also revision # 6.)

Nothing prevents the Department from extending a comment period or holding additional comment periods during the permitting process for a treatment, storage, or disposal facility. These amendments do not affect existing procedures for appeal of the Department's final permit decisions under § 100.514.

(5) REVISION: Development of a Community Involvement Plan (§ 100.41(b)(5)): These amendments require that facilities which have submitted an application for a HWI permit develop a Community Involvement Plan (CIP) and include it with the application for the Department's review and approval.

BASIS: References # 4, 12, 14.

DISCUSSION: The purposes of the CIP are: (a) to ensure that the local community is informed regarding technical and regulatory matters related to the proposed HWI facility, (b) ensure that a mechanism is in place for the community to obtain information related to the proposed facility, and (c) provide a forum for the community to voice their comments and concerns to the facility and regulatory agencies as these concerns arise. This approach places more responsibility on the owner/operator of the proposed facility to handle public participation, but also is intended to increase access to the Department and local governmental authorities. Guidance for development of a CIP is available, including the "RCRA Public Involvement Manual' (EPA/530-R-93-006).

(6) REVISION: Final permit modification stage to incorporate trial burn results and Phase II risk assessment information (§ 100.63-Appendix I): These amendments revise the classification of final permit modifications to incorporate trial burn results and establish final operating conditions.

BASIS: References # 4, 12, 14.

DISCUSSION: These amendments revise the classification of final permit modifications to incorporate trial burn results and establish final operating conditions so that all modifications are either Class 2 or Class 3, rather than retain a category for Class 1 modifications with prior approval. The purpose of this amendment is to ensure that there is a public comment period for all modifications of hazardous waste incinerator permits at the time the permit is finalized to incorporate trial burn and Phase II risk assessment results, and a Class 1 with prior approval does not require a comment period. Reorganization of this section has been done to be consistent with EPA's June 2, 1994 proposed regulations for enhanced public participation, but no other substantive changes were made.

(7) REVISION: Addition of disclosure requirements for a permit to operate a hazardous waste incineration facility (§ 100.40(b)): These amendments provide explicit requirements for disclosure of past compliance history by an applicant(s) for a permit to operate a hazardous waste incineration facility.

BASIS: References # 2, 5, 14, 15.

DISCUSSION: Under existing regulations, applicants for a hazardous waste treatment storage or disposal facility permit are not required to provide a disclosure to the Department regarding their past environmental compliance history. These amendments provide explicit requirements for disclosure of past compliance history by an applicant(s) for a permit to operate a hazardous waste incineration faculty. The compliance history is important information for both the Department and the public in evaluating an applicant's commitment and ability to manage an incineration facility safely and in accordance with all applicable environmental regulations to ensure protection of human health and the environment. The Commission also identified a need for legislative action to clarify the Department's authority to consider an applicant's compliance history in a permit decision.

(8) REVISION: Minor amendments to ensure that § § 100.22 and 100.41 are consistent with the revisions to Part 264, such as revised citations, formatting, and overall organization of these sections.

BASIS: These amendments ensure consistency between amendments to Part 100 and Part 264.

THE FOLLOWING REVISIONS ARE INCORPORATED INTO 6 CCR 1007-3. PART 264- SUBPART O:

(9) REVISION: Part 264-Subpart O Performance Standards (§ 264.342): These amendments contain a two level approach to establishing Part 264-Subpart O performance standards for emissions from an incinerator burning hazardous waste:

LEVEL I. A human health, risk based, target level that cannot be exceeded based on a full Multi-Pathway Health Risk Assessment (MPHRA) which considers both direct and indirect exposure pathways for the full suite of compounds examined during the approved trial burn. The MPHRA is subject to review and approval by the Department. The acceptable performance standard for the MPHRA is an ALCR target level of 1 E-6 (1×10^{-6}), and a hazard index (or quotient, as appropriate) of < 0.25 for noncarcinogens. (See also the discussion of the Phase II risk assessment requirements under revision #1 to Part 100.)

LEVEL II: A human health, risk based performance standard that cannot be exceeded at anytime as a result of the emissions from the permitted hazardous waste incinerator. Level II performance standards are used during the operational period as a tool to assess whether levels of stack emissions of specified metals and organic compounds exceed the health based standards of Tables IV and V of this Subpart. Periodic compliance stack testing, including those tests required under amended § 264.347(e), is utilized to make this assessment.

BASIS: References # 1, 4, 9, 14.

DISCUSSION: These amendments establish performance standards and a two level approach to evaluating compliance with the performance standards of Subpart O. During the facility's permit application process, and prior to a final decision on permit issuance, the facility will be required to perform two MPHRAs under these amendments. The first (Phase I pre-trial bun) MPHRA is performed on the design (estimated) emissions from the facility to determine if a unacceptable human health risk exists, and establish whether or not to proceed with a permit. If a draft permit is prepared, the information is utilized by the Department to determine applicable permit conditions for the facility. The second (Phase II) MPHRA is performed using the actual measured (trial burn) emissions data from the facility to determine whether the calculated health risk from the facility meets the performance standards established in Level I. If those performance standards are met, this information will be used to establish final permit conditions for the facility.

The Phase II (post-trial burn) MPHRA establishes a conservative, estimated, overall high end individual risk from exposure to emissions from the incineration device, and is best performed in conjunction with a trial burn. It does not provide a straightforward quantitative measure of compliance during the operational period. Performing a MPHRA is both complicated and potentially costly, and it is likely to be a cumbersome procedure for conducting periodic compliance tests when applied to normal operating conditions. Using the MPHRA as a compliance test would best be done concurrently with a repeated trial burn. For Level I, the established target risk level is a 1 E-6 upper-end ALCR, and a hazard index (or quotient, as appropriate) of < 0.25 for noncarcinogens. This ALCR target level is currently used by the Department for its CHWA regulatory programs in assessing high-end human health estimates of risk from environmental exposures. Use of a hazard index of 0.25 is designed to account for background exposure to the same or other compounds with the same health effects from other sources.

These amendments establish compound specific numerical performance standards (Level II) for the compounds listed in Appendices IV and V of the BIF Rule against which to compare the emissions from the HWI facility. These are quantitative ambient air standards which must be met by the stack emissions under approved operating conditions. The Level II standards are linked to health based inhalation standards promulgated by EPA in the BIF Rule, published in Appendices IV and V of the BIF Rule as the Reference Air Concentration (RAC) and the Risk Specific Dose (RSD), respectively, and are at least as protective. For carcinogenic compounds, these amendments establish a more conservative target level for the ALCR of 1 E-6 (as opposed to 1 E-5), implemented by dividing each RSD in the BIF rule by 10. Level II assesses only direct inhalation risk, but requires a consideration of the relative contribution of each exposure pathway to the risk which was calculated under Phase II. Lowering the target risk level, and taking into consideration the relative percentage contribution of each major exposure pathway, compensates for the indirect portion of the potential risk not taken into account using only a direct inhalation pathway, and is consistent with target risk levels utilized in the Department's hazardous waste control program for protection of human health and the environment.

These amendments set an acceptable target level of 1 E-6 for each carcinogen, which is ten times more conservative than the RSD values in the BIF rule (i.e., RSD/10). The RACs have not been revised, as they are conservatively based on 25% of the Reference Dose (RfD) (see BIF rule preamble discussion, Feb. 21, 1991). A more detailed discussion of specific standards for each category of compounds (i.e., metals, particulate matter, hydrogen chloride gas and chlorine, and organic compounds) is provided elsewhere in this Statement of Basis.

The Commission concluded that trial burn data is designed to represent extremes of normal operating conditions, and does not reflect operation at upset conditions. Using a conservative ALCR target for the Level II standards is considered a valid approach to estimate the high end direct inhalation risk without performing a MPHRA for routine compliance activities.

Compliance with the numerical standards established in the BIF rule was determined by the Commission to provide sufficiently conservative and protective standards, and is a more useful and enforceable method for assessing routine compliance than reliance upon a MPHRA. As health based standards are revised, or additional standards developed, the Commission will promulgate appropriate revisions to these regulations. These amendments establish that non-compliance with Level II performance standards would be a violation of the facility's permit, and would be information which would be assessed by the Department in determining whether a Level I MPHRA would be required during the operational period.

Under the BIF rule, the allowable ALCR for metals is 1 E-5, and organic products of incomplete combustion (PICs) are not factored into the risk equation if DRE is met, except that risk from polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/F) is calculated for facilities utilizing certain air pollution control devices. PCDD/F risk is then added at a 1 E-5 ALCR level, resulting in total allowable risk under the BIF rule of 2 E-5. The published RSDs (and RACs) for other compounds are applied only to the low risk waste exemption under 40 CFR 266.109, and are therefore not required to be examined for all cases. Therefore, these amendments result in a more stringent regulation for incineration facilities than the BIF Rule or existing Subpart O regulations.

For Level II, these amendments require a summation of ALCR from metals, PCDD and organic PICs, (i.e., $ALCR_{total} = ALCR_{metals} + ALCR_{PCDD/F} + ALCR_{PIC}$) based on a comparison of emissions (estimated and actual) with the RSD (see Equations in § 264.342). The performance standard for this comparison is ALCR ≤ 1 E-6. This standard is more conservative than that under the BIF rule (i.e., 1 E-5).

(10) REVISION: Particulate matter standard (§ 264.343). These amendments revise the particulate matter (PM) standard from 0.08 to 0.010 grains per dry standard cubic foot (gr/dscf) in the stack emissions from a HWI facility.

BASIS: References # 4, 5, 6, 10, 13, 14.

DISCUSSION: These amendments establish a PM standard of 0.010 grains per dry standard cubic foot (gr/dscf) (23 mg/dscm) in the emissions from all units subject to these revised Subpart O standards. This limit replaces the standard of 0.08 gr/dscf found in both Part 264- Subpart O, and in the federal BIF rule. Information presented to the Commission by the Department, the Sierra Club, and that located in EPA documents, indicates that the existing 0.08 standard is not representative of best operating practice (BOP) or maximum achievable control technology (MACT) for hazardous waste incinerators. Based on EPA documents, the 0.010 standard represents good combustion practice, is consistent with the CETRED BOP values and the proposed federal new source performance standard (NSPS) for municipal waste combustors.

Control of PM in emissions from combustion devices is considered an essential aspect in control of certain metals, polychlorinated dibenzo-p-dioxins and dibenzofurans (PCDD/Fs), and other semi-volatile organic compounds. This amended PM standard will require owners and operators of Subpart O units to use the emissions control technology necessary to effectively limit participate emissions and the inorganic and organic compounds associated with these emissions.

(11) REVISION: Total Hydrocarbon standard (§ 264.342(d)): These amendments establish a total unburned hydrocarbon (HC) standard of 20 parts per million volume (ppmv) basis. Continuous monitoring of HC in stack emissions is required.

BASIS: References # 1, 4, 5, 6.

DISCUSSION: These amendments establish a total hydrocarbon (HC) standard to ensure that all Subpart O units operate under conditions indicative of efficient combustion. An HC standard and continuous emissions monitoring is to be used in addition to the carbon monoxide standard of 100 ppm, to provide a second indicator of combustion efficiency. In the BIF rule, HC monitoring is implemented with an alternative CO standard in the BIF Rule, and would be set in the final permit based on the results of the trial burn. No alternate HC standard is proposed based on characteristics of the feed to the unit, as in the BIF rule.

The Commission has determined that a 100 ppm CO standard in combination with a HC standard and monitoring represents more effective control of organic emissions which might otherwise pass undetected into the atmosphere. The utility of HC limits is discussed in the preamble to the BIF rule (Feb. 21, 1991), and a 20 ppm limit is considered representative of good combustion conditions. Good combustion conditions are also correlated with low emissions of PICs.

The HC monitoring proposed is not compound specific, rather the requirement is added to monitor and control those parameters which will be used to achieve the performance standard for POHCs and other organic compounds, and minimize formation of PICs.

(12) REVISION: Carbon Monoxide (CO) standard (§ 264.342(c)): These amendments establish a CO standard of 100 ppmv, applicable to the emissions from all Subpart O units.

BASIS: References# 1, 4.

DISCUSSION: Under existing Subpart O regulations, the CO limit was established during the trial burn. These amendments establish a CO standard of 100 ppmv, applicable to the emissions from all Subpart O units. Although the Commission agreed that CO is not conclusively correlated to DRE, CO is indicative of efficient combustion conditions and CO is a PIC. Since results of trial burns show that the DRE is routinely met when CO is below 100 ppm, this standard has been implemented in a number of incinerator permits nationwide by state agencies and EPA. No alternative (higher) CO limit is allowed under these amendments as it is in the BIF rule.

(13) REVISION: Metals emissions standards (§ 264.344): These amendments establish metals feed rate and emissions standards for hazardous waste incineration facilities.

BASIS: References # 1, 4, 5, 6.

DISCUSSION: These amendments incorporate metals emissions standards (and feed rate limitations) developed under the federal BIF rule. Values for acceptable ambient levels of carcinogenic compounds, (i.e., the risk specific dose (RSD) in Appendix V of the BIF rule) have been lowered by a factor of ten to provide a more conservative limit corresponding to a added lifetime cancer risk to the MEI of one in a million (1E -6). The values for acceptable ambient levels of non-carcinogenic compounds (i.e. reference air concentrations (RACs)) were not modified as they are based on 25% of the reference dose (RfD), which considers threshold health effects. These limits are health based standards and therefore provide an additional level of protection over the existing Subpart O regulations.

(14) REVISION: Hydrochloric acid/chlorine gas standard (§ 264.345): These amendments incorporate the emissions standards for hydrochloric acid gas and chlorine developed under the federal BIF rule into these revised Subpart O regulations.

BASIS: References # 1, 4, 5.

DISCUSSION: These amendments incorporate the emissions standards for hydrochloric acid gas and chlorine developed under the federal BIF rule into these revised Subpart O regulations, a change which is consistent with EPA's national policy.

(15) REVISION: Controls for dioxins and furans (§ 264.342(e)): These amendments establish an emissions standard of 13 nanograms per dry standard cubic meter of gas (ng/dscm) total congeners, and 0.17 ng/dscm toxicity equivalency (TEQ) for dioxins and furans. These amendments specify that the Director may set a lower standard in a permit if these values are not protective based on the Phase I or Phase II MPHRA.

BASIS: References # 4, 10, 13.

DISCUSSION: These amendments establish an emissions limit of 13 ng/dscm (based on the sum of all tetra through octa dioxin and furan congeners) for the TCDD (tetra-CDD) equivalents, and a 0.17 ng/dscm TEQ of 2, 3, 7, 8-tetrachlorinated dibenzo-p-dioxin (NATO 1989 international criteria). A requirement is included that PCDDs/Fs be sampled and analyzed for in any trial burns for Subpart O units. The BIF rule addresses only those combustion devices using certain types of air pollution control devices. A similar requirement is being implemented under the combustion strategy. A great deal of controversy and uncertainty surrounds PCDDs/Fs as products of incomplete combustion or their reformation in exhaust gas from HWI facilities and other combustion devices. An initial PCDD/Fs stack test during the trial burn provides a baseline demonstration of the emissions rate of these compounds, and allows a determination whether target health risk levels (i.e., Level I or Level II performance standards) are exceeded by the emissions levels.

Alternative stack gas emissions limits (i.e., if 13 ng/dscm and 0.17 ng/dscm TEQ is not protective based on the risk assessment), and ongoing requirements for emissions monitoring will be based on the levels demonstrated during the trial burn. Without these data, no basis will exist for determining if PCDD/Fs emissions are present at levels which pose a health risk. Further, no state air emission limit currently exists for these compounds from hazardous waste incineration or combustion devices, so stack testing for PCDD/Fs is not likely to be required under an air emissions permit at this time. A document entitled “Combustion Emissions Technical Resource Document”, EPA530-R-94-014, June 1994, performed calculations to generate BOP levels, using a MACT-type analysis, and this information supports use of a specific emissions standard very close to the one adopted in these amendments. EPA has published proposed revisions to the NSPS for municipal waste combustors which supports a total dioxin standard of 13 ng/dscm.

(16) REVISION: For all Appendix VIII organic compounds: These amendments incorporate language into § § 264.342 and 100.22(c) to explicitly require:(a) facilities report results of all compounds sampled and analyzed during the trial burn, not just POHCs, including PICs identified in the analysis of stack gas; (b) facilities calculate maximum ambient air concentrations with an approved dispersion model using measured values from the trial burn stack test; and (c) facilities perform a comparison of calculated values from item (b) with health based values of RACs and RSDs from 40 CFR Part 266 appendices IV and V.

BASIS: References # 1, 4, 9, 14.

DISCUSSION: Under existing Subpart O and the federal BIF rule, facilities are not required to perform a comparison of levels of organic compounds detected in the stack emissions during the trial burn with the RACs and RSDs of Appendix IV and V to determine if health based emissions levels have been exceeded for these compounds. Conformance with the DRE standard for POHCs is the only standard for organic compounds. These amendments provide an additional level of specificity and protection not contained in the federal BIF rule. The procedure could also be used to back-calculate compound specific emissions limits. This requirement will not place any significant financial burden on the facility performing the stack test, as the emissions sampling and analyses will have already been performed under the analytical methods required for DRE determination for the POHCs. The facility must then use the measured levels of organic compounds in a conservative or site specific emissions dispersion model to determine maximum ambient air concentration levels. This effort will quantify those PICs which are identified by the specific analytical method used, such as volatile organic compounds using method 8240 (or equivalent).

(17) REVISION: Periodic sampling and analyses of environmental media (air, soil, surface water) in proximity to the incineration facility (§ 264.347(d)): These amendments provide the explicit authority to the Department to require ambient monitoring of environmental media in a facility's permit, or prior to receiving a final operating permit, under certain circumstances.

BASIS: References # 2, 5, 6, 14.

DISCUSSION: Under these amendments, if the results of the air dispersion modeling and risk assessments conducted under revised § 100.22(c), or other information obtained by the Director, indicate that ambient levels of Appendix VIII constituents may pose a risk to human health or the environment (by exceeding performance standards), the Director will require the Permittee to sample environmental media and analyze it for the constituents of concern. An example would be emissions of metals which could accumulate in soils at some distance from the facility's stack if these were identified at significant levels in the stack emissions.

This requirement could include initial sampling conducted prior to operation of a hazardous waste incinerator, which would be used to establish baseline levels of the constituents of concern at selected locations. This background information is necessary in order to make comparisons before and after the facility goes into operation. Locations of sampling would be based upon the air dispersion modeling results, and an assessment of the surrounding area, including land use patterns. Periodic monitoring of the media of concern for these compounds would be required in the facility's operating permit to provide for comparison with the baseline levels of the constituents of concern. This determination would be based on information available to indicate whether a potential for significant deposition and accumulation exists for the compounds of concern.

If sampling of environmental media is required, these amendments require a Permittee to develop a sampling and analysis plan for the Director's review and approval. Following the Director's approval of the sampling and analysis plan and its subsequent implementation, the Permittee would prepare a report containing the results of such sampling and analyses to the Director. The Director would review the results and provide comments to the Permittee. Based on these results, the Director may require the Permittee to perform revised and/or additional site specific risk assessments. If the results of sampling of any environmental media indicate that levels of any Appendix VIII constituents released as a result of hazardous waste incineration activities may pose a risk to human health or the environment, these amendments specify that the Director would modify, revoke and reissue, or terminate the State RCRA permit for the incineration facility.

The Commission recognizes that a number of uncertainties exist in designing and performing ambient monitoring of air, soil, water or vegetation, as well as interpreting the results obtained. In addition, is likely to be an economically significant effort. The benefits, costs, and uncertainties would need to be examined in making site specific decisions regarding such a requirement. The Commission determined that implementation of such a requirement will aid in addressing both technical issues and certain citizen concerns, such as contamination of food crops and local ambient air quality issues as a result of the incineration activity. It would also provide data with which to evaluate and compare risk assessment estimates.

(18) REVISION: Periodic stack emissions test (§ 264347(e)): These amendments clarify the Department's authority to incorporate a periodic stack emissions sampling and analysis frequency in an incineration facility's operating permit.

BASIS: References # 5, 6, 14.

DISCUSSION: Under the current Subpart O regulations (§ 264.347(a)(3)), the Department had the authority to require the Permittee to conduct sampling and analysis, and report the results. However, the Commission considered the requirement too vague as a basis for establishing permit conditions. These amendments clarify the authority to explicitly require periodic testing in accordance with procedures specified in the facility's permit to demonstrate compliance with applicable performance standards. This testing may be similar to a repeat of the trial burn, or may examine only certain compounds of concern. It is not intended that the Department would require DRE to be calculated at each sampling event. However, the facility may be required to reaffirm compliance with the DRE standard during the operational life of the permit, particularly if information indicates that this performance standard is not being met These amendments also require that a report containing the results of the periodic stack test would be prepared in accordance with the permit, generally within 90 days of completion of the testing.

(19) REVISION: Compound specific emissions monitoring (§ 264.347(f)): These amendments explicitly provide the authority to the Department to incorporate compound specific emissions monitoring requirements into the facility's operating permit.

BASIS: Clarification of existing regulations, References # 6, 14.

DISCUSSION: These amendments clarify the Department's authority to address compound specific emissions monitoring in the facility's operating permit for those compounds that are of major concern, and the technology exists to monitor these compounds. These amendments require the Permittee to assess the available technology for monitoring the required emissions. If the Permittee cannot locate commercially available technology that meets the requirements for monitoring required by the Director, the Permittee would be required to submit a certified statement to the Director explaining the facility's efforts to meet the requirement. Currently, continuous emissions monitors (CEMs) are available for O2, CO, HC, CO2, HCl, SOx, NOx, opacity, certain chemical warfare agents (e.g., mustard), but not for a wide variety of organic compounds (i.e., PICs) which may be present at low levels in the stack emissions. However, industry and academic organizations are working on development of commercially available monitoring devices for organic and metallic compounds. The appropriate devices would be specified in an operating permit, once commercially available.

(20) REVISION: Remote data acquisition for continuously monitored operating conditions and emissions (§264.347(g)): These amendments require the Permittee to provide a system to the Department for remote data acquisition of periodically or continuously monitored operating conditions and emissions.

BASIS: References # 5, 6, 14.

DISCUSSION: Remote monitoring generally consists of real-time electronic data transfer from an operating facility to the regulatory agency(s). These amendments require that the general performance characteristics of a remote monitoring system would be proposed in the facility's permit application, or specified by the Director in an operating permit, to improve real time monitoring of facility emissions and assess compliance with permit standards. The system would be used by the Director to monitor the operating conditions and the periodically and continuously monitored emissions of the incineration facility. For example, such a system is in use for the RMA-SQ1. The system would typically be located at the Department's office, but the technology exists to place a monitor at other locations, such as a local health department

(21) REVISION: Additional personnel training requirements (§ 264.347(h)): These amendments add personnel training requirements specific to operators of hazardous waste incineration faculties and provide a more explicit set of requirements for incineration facilities than contained in § 264.16.

BASIS: References # 13, 14.

DISCUSSION: Under existing regulations, owners and operators of all hazardous waste treatment storage or disposal faculties are required to develop a personnel training plan as part of the facility's permit application. These amendments expand on the existing requirements by adding language specific to training for operators and maintenance personnel at incineration facilities. In particular, operators will be required to complete a training program to ensure that they are qualified to operate an incineration facility or certain aspects of one for which the operator is responsible. Maintenance personnel must be trained in their area of responsibility, and all personnel must receive training in contingency plan and emergency response procedures. The Commission also identified a need for legislative action to clarify the Department's authority to require operators of hazardous waste incineration facilities to complete a certification program to demonstrate their qualifications, similar to that required by EPA for operators of municipal waste combustors or publicly owned treatment works.

(22) REVISION: Additional requirements for contingency plans at hazardous waste incineration facilities § 264.347(i)): These amendments provide a more explicit set of contingency plan and emergency response requirements for incineration facilities than contained in Part 264-Subparts C and D.

BASIS: Reference # 14.

DISCUSSION: Under existing regulations, owners and operators of all hazardous waste treatment storage or disposal facilities are required to develop plans and procedures to prepare for, prevent, and respond to emergencies involving waste management operations as part of the facility's permit application. These amendments expand on the existing requirements by adding language specific to owners and operators of incineration facilities. In particular, these amendments require development of more sophisticated evaluation procedures for emergencies and accident involving hazardous waste, and place more responsibility on the owner or operator to coordinate off-site emergency response efforts with the local emergency response authorities.

Final Note: An applicant should be aware that the owner or operator of a proposed hazardous waste incineration facility is required to obtain a certificate of designation under 25-15-Part 5 C.R.S., for a facility applying for a permit to burn hazardous waste under the requirements of 6 CCR 1007-3, Part 264-Subpart O.

Statement of Basis and Purpose – Rule-making Hearing of August 22, 1995

8.19 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 261, 264, 265, 267, and 100 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

Carbamate Production

In a February 9, 1995 final rule (60 FR 7824-7859), the Environmental Protection Agency (EPA) amended the regulations for hazardous waste management under the Resource Conservation and Recovery Act (RCRA) to reduce hazards to human health and the environment from the ongoing manufacture of carbamate chemicals, which are formulated for use as pesticides and in the production of synthetic rubber.

These amendments provide equivalency with the 2/9/95 final rule and include the following revisions:

A) Amending § 261.32 and Appendix VII of Part 261 to list as hazardous six wastes generated during the production of carbamate chemicals. The new wastes include: (1) K156 - Organic wastes from the production of carbamate and carbamoyl oximes; (2) K157 - Wastewaters from the production of carbamates and carbamoyl oximes; (3) K158 - Bag house dust, and filter/separation solids from the production of carbamates and carbamoyl oximes; (4) K159 - Organics from the treatment of thiocarbamate wastes; (5) K160 - Solids from the production of thiocarbamates and solids from the treatment of thiocarbamate wastes; and (6) K161 -Purification solids, bag house dust, and floor sweepings from the production of dithiocarbamate acids and their salts.

B) Amending the definition of hazardous wastes in § 261.3 to exempt biological treatment sludges generated from the treatment of certain wastes provided the sludges do not display any of the characteristics of a hazardous waste (i.e. ignitability, corrosivity, reactivity, or toxicity).

C) Adding 58 specific chemicals to the § 261.33 list of commercial chemical products that are hazardous wastes when discarded and to the Part 261, Appendix VIII list of hazardous constituents upon which listing determinations are based.

The Hazardous Waste Commission agrees with EPA's interpretative rule of August 14, 1995 (60 FR 41817-41818) in which EPA changed its interpretation of carbamate “production” to not include non-carbamate intermediates that are produced at a site other than the ultimate site of carbamate production.

The Hazardous Waste Commission is making an additional amendment to this rule by adding a “common name” column to the P-waste and U-waste tables of § § 261.33(e) and (f) to provide common name listings for the various substances listed in the tables.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 60 FR 7824-7859, February 9, 1995, and as amended at 60 FR 19165-19167, April 17, 1995, and at 60 FR 25619-25620, May 12, 1995. This Basis and Purpose also incorporates by reference the interpretative rule published in the Federal Register at 60 FR 41817-41818, August 14, 1995.

Revision of § 264.314

This amendment adds subparagraph (f) to § 264.314. Section 264.314(f) prohibits the placement of any free liquid in a hazardous waste landfill. This is intended to prevent the formation of hazardous leachate that could migrate and cause surface or groundwater contamination. The federal requirements of 40 CFR § 264.314(f)(1) and (2) allow for an exemption to a ban on disposing of nonhazardous liquid wastes in a hazardous waste landfill if the only reasonably available disposal method for such liquids is placement in a landfill or unlined surface impoundment that may already contain hazardous wastes and placement in the hazardous waste landfill will not present a risk of contamination to underground sources of drinking water. Colorado is not adopting state analogs to the exemption provided for in 40 CFR § 264.314(f)(1) and (2). Rather the state is prohibiting the disposal of any free liquid in a hazardous waste landfill and is therefore state more stringent than the regulatory requirements of the Environmental Protection Agency.

Revision of § 265.314

This amendment adds subparagraph (g) to § 265.314. Section 265.314(g) prohibits the placement of any free liquid in a hazardous waste landfill. This is intended to prevent the formation of hazardous leachate that could migrate and cause surface or groundwater contamination. The federal requirements of 40 CFR § 265.314(g)(1) and (2) allow for an exemption to a ban on disposing of nonhazardous liquid wastes in a hazardous waste landfill if the only reasonably available disposal method for such liquids is placement in a landfill or unlined surface impoundment that may already contain hazardous wastes and placement in the hazardous waste landfill will not present a risk of contamination to underground sources of drinking water. Colorado is not adopting state analogs to the exemption provided for in 40 CFR § 265.314(g)(1) and (2). Rather the state is prohibiting the disposal of any free liquid in a hazardous waste landfill and is therefore state more stringent than the regulatory requirements of the Environmental Protection Agency.

Revision of § 264.1

Paragraphs (g)(1) and (g)(2) of § 264.1 are revised by deleting the language in the current regulations which expired January 1, 1986 and is no longer in effect. A note following paragraph (g)(2) is also being added at this time. This note states that hazardous wastes burned in boilers and industrial furnaces are also subject to federal requirements in Subpart H of 40 CFR Part 266.

Revision of § 265.1

Section 265.1 is being amended by adding a note following paragraph (g)(2). This note states that hazardous wastes burned in boilers and industrial furnaces are also subject to federal requirements in Subpart H of 40 CFR Part 266.

Revision § 267.30

Paragraph (b)(1) of § 267.30 is amended by replacing the reference to “40 CFR Part 266, Subpart E” with the proper citation of “Part 279” to provide equivalency with the federal language of 40 CFR § 266.100(b)(1).

Reservation of Part 267 Subpart E

A notation is added on page 512 of the current regulations to indicate that Subpart E of Part 267 is reserved. The table of contents page for Part 267 already indicates that Subpart E is reserved.

Correction of § 100.10(a)(8)

Paragraph (a)(8) of § 100.10 is amended by changing “spills” to “discharges” to correspond to the federal language of 40 CFR § 270.1(c)(3). This amendment provides state equivalency with the regulatory requirements of the Environmental Protection Agency.

Correction of Typographical Errors and Omissions

In addition these amendments also correct typographical errors and inadvertent omissions that occur in the current regulations.

Statement of Basis and Purpose - Rule-making Hearing of October 17, 1995

8.20 Basis and Purpose.

These amendments to the Colorado Hazardous Waste Regulations 6 CCR 1007-3 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

Reformatting and Republication of the Hazardous Waste Regulations

The Colorado Hazardous Waste Regulations 6 CCR 1007-3 are being revised at this time to replace the existing version of the regulations with a new reformatted version. The reformatted version of the regulations has been restructured by indenting subparagraphs; adding section headers at the top right margin of every page; correcting typographical errors that occur in the current regulations; and repaginating the regulations. This effort was undertaken by the Division to enhance the reader's capability to use the regulations.

Universal Waste

These new streamlined hazardous waste management regulations govern the collection and management of certain widely generated wastes (batteries, pesticides and thermostats) known as universal wastes. This final rule will greatly facilitate the environmentally-sound collection and increase the proper recycling or treatment of hazardous waste nickel cadmium and other batteries, certain hazardous waste pesticides, and mercury-containing thermostats.

Colorado is not required under federal law to adopt this Universal Waste rule. Without this rule, these universal wastes would be regulated as hazardous wastes under RCRA. The Environmental Protection Agency, however, allows and encourages states to adopt the universal waste rule to provide flexibility to states to regulate specific hazardous wastes. Universal wastes are subject to wide spread use which makes disposal of these hazardous wastes difficult to control.

The current RCRA regulations have been a major impediment to national collection and recycling campaigns for these wastes. This rule should: ease the regulatory burden on retail stores and others that wish to collect or generate these wastes; facilitate programs developed to reduce the quantity of these wastes going to municipal solid waste landfills or combustors; and assure that the wastes subject to this system will go to appropriate treatment or recycling facilities pursuant to the full hazardous waste regulatory controls. These Part 273 universal waste regulations will serve as a prototype system to which the Department may add other similar wastes in the future. A petition process is included in Subpart G of the Part 273 regulations through which additional wastes could be added to the universal waste regulations in the future.

The Hazardous Waste Commission is adopting state analogs equivalent to the regulatory requirements of EPA's May 11, 1995 final rule (60 FR 25492-25551) with one exception. The Hazardous Waste Commission is not adopting a state analog to 40 CFR § 273.32(a)(2). This federal provision exempts a large quantity handler of universal waste who has already notified EPA of his/her hazardous waste management activities and has received an EPA identification number from the requirement of having to renotify under § 273.32. The Department believes that the renotification requirement is necessary for identifying the large quantity handlers who are participating in universal waste management activities; and completing a Notification Form is an easy way for facilities to notify the Department of their universal waste management activities. Because Colorado is not adopting a state analog to this federal renotification exemption of 40 CFR § 273.32(a)(2), these amendments are more stringent than the EPA regulations.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 60 FR 25492-25551, May 11, 1995.

Amendment to Change "Department" to "Commission" in § 260.22

Section 260.22 is being amended at this time so that petitions from people seeking to exclude a waste at a particular generating facility from the lists in Subpart D of Part 261 are submitted to the Hazardous Waste Commission instead of the Department.

Statement of Basis and Purpose - Emergency Rulemaking Hearing of November 28, 1995

8.21 Basis and Purpose.

These amendments to 6 CCR 1007-3, § § 264.1080, 265.1080 and 265.1082 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S. and pursuant to the emergency rule provisions in § 24-4-103(6), C.R.S.

Organic Air Emission Standards for Tanks. Surface Impoundments and Containers-Postponement of the Effective Date

Colorado currently operates an authorized hazardous waste management program under the federal Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. sections 6901 to 6992. The state's program is equivalent to and consistent with the federal hazardous waste program established by the U.S. Environmental Protection Agency ("U.S. EPA") pursuant to RCRA. To maintain its authorization to operate its state program in lieu of the U.S. EPA operating a federal program, Colorado must adopt state requirements equivalent to and consistent with the overlying federal requirements. Further, while the state has the authority to be more stringent than the federal program, only where there has been a clear state need to address a specific hazardous waste management issue in Colorado has the Hazardous Waste Commission adopted state program requirements which are more stringent than the overlying federal requirements.

At the April 18, 1995 Hazardous Waste Commission meeting the Commission adopted air standards that apply to owners and operators of permitted hazardous waste treatment, storage and disposal facilities (TSDF) and certain hazardous waste generators accumulating waste on-site in RCRA permit-exempt tanks and containers. The air emission standards adopted by the Commission were intended to be and were equivalent to the federal air emission standards adopted by the U.S. EPA. In adopting the state air emission standards the Commission relied in large part upon the basis expressed by the U.S. EPA in adopting the federal air emission standards. The effective date for both the state and federal air emission standards was to be December 6, 1995.

On November 13, 1995, U.S. EPA postponed the effective date of the federal air emission standards until June 6, 1996. (60 FR 56952) This extension of the federal effective date has created the situation where, if the state effective date is not extended, the state program will inadvertently become more stringent than the federal program. Such a result was certainly not the intent of the Commission in originally promulgating the state emission standards. Further, during this six month extension of the federal effective date, the U.S. EPA will also be considering certain amendments to the federal air emission standards to increase compliance flexibility and, if found to be warranted, to reduce certain regulatory requirements. It is likely that amendments will be made to the federal air emission standards during this process, thereby creating further distinctions between the state and federal programs. In light of U.S. EPA action and the information it will be reviewing, the Commission will also be considering whether the state air emission standards should be amended.

The Commission believes that requiring compliance with the state air emission standards before any overlying federal effective date places an unnecessary burden upon the regulated community in Colorado. The creation of such a situation was not the intent of the Commission in originally promulgating the state air emission standards which the U.S. EPA, and the Commission, may amend during the six month extension of the federal effective date is unwarranted.

Based on the above the Commission finds that the immediate adoption of an extension of the state effective date for the state air emission standards adopted by the Commission at its April 18, 1995 hearing is imperatively necessary for the preservation of public health, safety or welfare. Such an extension is also necessary to the maintenance of state consistency with federal environmental requirements which was the intent of the Commission. Further, the Commission finds that compliance with the otherwise applicable notice and hearing requirements of the State Administrative Procedure Act would prevent the Commission from extending the effective date of the state air emission standards prior to the current December 6, 1995 effective date and, therefore, compliance with such requirements would be contrary to the public interest.

The Commission has today extended, for a period not to exceed ninety days, the effective date of the air emission standards at its April 18, 1995 hearing, or until such time when the Commission adopts a final rule extending the effective date, which ever occurs earliest. A permanent rulemaking hearing for the rules will be held on January 16, 1996.

Statement of Basis and Purpose - Rule-making Hearing of January 16, 1996

8.22 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 261, 264, 265, 273, 100 and 6 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

Addition of Aerosol Cans to the Universal Waste Regulations

At the October 17, 1995 Hazardous Waste Commission Hearing, the Commission adopted regulations governing the collection and management of certain widely generated wastes, known as “universal wastes”. The Part 273 universal waste regulations currently address the management of waste batteries (i.e., nickel cadmium), certain waste pesticides, and waste mercury-containing thermostats. The Part 273 universal waste regulations provide a conditional exemption from full Subtitle C regulation for certain universal wastes, while still ensuring that management of these wastes is conducted in a manner that is protective of human health and the environment. The Part 273 regulations reduce the management requirements for generators, consolidation points (small and large quantity handlers of universal waste), and transporters. By relaxing the standards, collection of universal waste is simplified, thereby encouraging the establishment of and participation in environmentally-sound collection and recycling programs by generators and handlers of universal wastes. Increasing the availability of these collection and recycling programs will subsequently strengthen environmental protection by encouraging that these universal wastes are treated or recycled in facilities subject to the full hazardous waste regulations rather than disposed of, as many currently are, in municipal solid waste landfills and incinerators.

The Part 273 universal waste regulations also contain provisions for adding additional waste types to the universal waste system in the future. Subpart G of Part 273 describe the criteria and procedures involved in petitioning to have additional hazardous wastes added to the Part 273 universal waste regulations. This petition process enhances state flexibility by allowing states to add waste(s) to its universal waste program without requiring the waste(s) to be added at the federal level. In order for a petition to be successful, it must be demonstrated that regulation under the universal waste system is appropriate, and that the Part 273 requirements will improve waste management practices for the waste(s).

After receiving requests from industry to add aerosol cans to the universal waste regulations, the Colorado Department of Public Health and Environment has proposed that management standards for aerosol cans be added at this time under the universal waste regulations of Part 273.

Evaluation of the factors outlined in Subpart G of Part 273 for adding new universal wastes supports management of waste aerosol cans as a universal waste.

a) The contents of aerosol cans frequently contain a listed hazardous waste, or exhibit one or more characteristics of hazardous waste. Typical wastes generated in aerosol cans include various solvents, ignitable wastes, and other listed and/or characteristic wastes. As recyclable scrap metal, empty aerosol containers are exempted from RCRA regulation (§ 261.6(a)(3)(ii). However, aerosol containers that are not empty in accordance with § 261.7 and contain a listed or characteristic substance would be subject to regulation as a hazardous waste when discarded.

b) Waste aerosol cans are not exclusively generated by any specific industry or group of industry. Waste aerosol cans are commonly generated by a wide variety of types of generators, including households, retail and commercial businesses, office complexes, conditionally exempt small quantity generators, small businesses, government organizations, as well as major industrial operations. Waste aerosol cans generated by regulated hazardous waste generators are fully regulated as hazardous waste; whereas waste aerosol cans generated by exempt households are not subject to RCRA Subtitle C controls.

c) Waste aerosol cans are commonly generated by a large number of generators, and are frequently generated in relatively small quantities by each generator. The use of aerosol cans is pervasive throughout all levels of industry.

d) Requirements for the collection of waste aerosol cans have been developed to ensure close stewardship of the waste and prevent releases of any universal waste or component of universal waste to the environment. Specific universal waste aerosol can management conditions that have been added include: 1) requiring handlers of universal waste aerosol cans to immediately contain any universal waste aerosol can that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a separate individual container that is closed, sound, and compatible with the contents of the universal waste aerosol can; and 2) requiring that any universal waste aerosol can, and/or any container in which the universal waste aerosol cans are contained or accumulated, to be properly labeled or marked to identify the types of universal waste being managed.

e) Waste aerosol cans pose a relatively low level of risk during accumulation and transport in comparison to other hazardous wastes, and specific waste management regulations for waste aerosol cans have been added at § § 273.13(d) and 273.33(d) to ensure that management of these wastes is conducted in a manner that is protective of human health and the environment. Specific universal waste aerosol can management conditions that have been added include: 1) requiring handlers to ensure that incompatible wastes are separated and managed appropriately; 2) requiring a written procedure to be developed if the handler will be puncturing universal waste aerosol cans to ensure proper and safe operation of the can-puncturing unit; and 3) requiring that EPA Identification Codes be placed on the accumulation container at the time the universal waste aerosol can is emptied to ensure full and accurate waste characterization.

f) The Colorado Department of Public Health and Environment believes that simplifying and streamlining the requirements associated with collection and handling of waste aerosol cans will divert these waste aerosol cans from their disposal in municipal waste systems and channel them into proper recycling and management activities, subsequently encouraging the development of more efficient and effective collection systems. Such collection systems will, in turn, facilitate collection of not only the regulated portion of the waste stream, but also the unregulated portion of the waste stream.

g) The Colorado Department of Public Health and Environment believes simplifying the standards for management of aerosol cans by regulating them as universal waste under the Part 273 universal waste regulations will improve implementation of and compliance with the hazardous waste regulatory program while providing adequate protection of human health and the environment.

The requirements proposed today would offer a conditional exemption from the current Subtitle C hazardous waste requirements for universal waste aerosol cans. Compliance with the reduced set of Part 273 requirements would be an option that waste handlers may voluntarily choose. Operating under the Part 273 regulations would not be compulsory. If universal waste handlers wish, they may instead continue to manage their hazardous waste aerosol cans under the full RCRA Subtitle C regulations. If they do elect to follow the reduced Part 273 requirements, they would be subject to a number of conditions designed to provide adequate protection of human health and the environment.

Specific waste management requirements are being added at this time for small quantity handlers of universal waste aerosol cans (§ 273.13(d)) as well as for large quantity handlers of universal waste aerosol cans (§ 273.33(d)). These sections explain the requirements that small and large quantity handlers must follow when handling universal waste aerosol cans. They include requiring that the universal waste be managed in a way that prevents releases to the environment, and setting forth procedures that must be followed when handling universal waste aerosol cans (e.g., sorting the aerosol cans by type and compatibility of contents, and aerosol can-puncturing operation, etc.).

Included in the waste management standards of § § 273.13 and 273.33 are requirements for handlers who chose to puncture waste aerosol cans and remove its contents as part of their universal waste management activities. Handlers of universal waste who puncture aerosol cans to remove the contents of the can, or who generate other solid waste as a result of such activities must determine whether the contents of the aerosol can, residues and/or other solid waste are a listed hazardous waste, or if they exhibit a characteristic of hazardous waste. If the generated waste is a listed hazardous waste, or exhibits a characteristic of hazardous waste, it must be managed in compliance with all applicable requirements of Part 260 through Part 268, and Parts 99 and 100 of the Colorado Hazardous Waste Regulations 6 CCR 1007-3. If the generated waste is not a listed hazardous waste, or does not exhibit a characteristic of hazardous waste, it is not subject to the hazardous waste requirements, nor is it subject to the requirements of Part 273. This waste is, however, required to be handled in compliance with applicable federal, state, or local solid waste regulations (e.g., The puncturing of universal waste aerosol cans may require filing an Air Pollution Emission Notice [APEN], and the use of control devices to capture airborne contamination.).

Labeling and Marking requirements for universal waste aerosol cans are also being added at this time. Under § § 273.14 and 273.34, a universal handler managing waste aerosol cans at his/her facility is required to label each individual aerosol can or container in which the aerosol cans are contained or accumulated, with the words “Universal Waste-Aerosol Can(s)”, or “Waste-Aerosol Can(s)”. In addition to the labeling requirements of Part 262, § § 273.13(d)(4)(ii) and 273.33(d)(4)(ii) require that the container a handler uses to accumulate, store, or transport the hazardous waste contents removed from punctured universal waste aerosol cans be labeled with all applicable EPA Hazardous Waste Codes.

Subpart A is of Part 273 is also being revised at this lime by reorganizing § 273.2 as a general applicability section covering all the universal wastes, and by consolidating the general applicability provisions for pesticides and mercury thermostats previously found in § § 273.3 and 273.4 respectively into § 273.2. Reorganization in this manner will allow for the future addition of other wastes to the universal waste regulations.

This rule is an example of the Colorado Department of Public Health and Environment's effort to reduce regulatory burdens on affected parties without compromising environmental protection. Relaxing the standards for handlers of universal waste should simplify the collection of these universal wastes and encourage the establishment of collection and recycling programs. Increasing the availability of environmentally-sound collection and recycling programs should subsequently strengthen environmental protection of human health and the environment by encouraging that these universal wastes be treated or recycled in facilities subject to the full hazardous waste regulations rather than disposed of in municipal solid waste landfills and incinerators.

Amendment of § 260.2 Incorporation by Reference

Section 260.2 is being amended at this time by adding paragraph (c) to this section. This amendment fulfills the requirements of § 24-4-103 (12.5) (c) (II), C.R.S. That section requires materials incorporated by reference to state that the materials are available at the state publications depository libraries. This amendment also updates the editions of the referenced materials to 1995.

Deletion of “Hazardous waste disposal site” definition from § 260.10

This amendment deletes the definition of hazardous waste disposal site from § 260.10. Upon review of the regulations it was determined that this definition is not necessary in 6 CCR 1007-3. This amendment provides state equivalency with the regulatory requirements of the Environmental Protection Agency.

Amendment of § § 261.5(f)(3) and 261.5(g)(3)

The language of § 261.5(f)(3) and § 261.5(g)(3) were inadvertently revised to match the federal wording of 40 CFR § § 261.5(f)(3) and 261.5(g)(3) when the universal waste rule was adopted at the October 17, 1995 Hazardous Waste Commission hearing. The state analogs to 40 CFR § § 261.5(f)(3) and 261.5(g)(3) were previously more stringent than the federal language because Colorado's regulations prohibited a conditionally exempt small quantity generator from disposing of acute hazardous waste or hazardous waste onsite. Sections 261.5(f)(3) and 261.5(g)(3) are being amended at this time to re-adopt the more stringent language and prohibit onsite disposal.

Amendment of § 6.04(b)

These amendments to § 6.04(b) are being made in response to the Hazardous Waste Commission's concern that the annual fees are not being paid in a timely manner. After the fiscal year 1994-95 billing an outstanding balance of $16,000.00 is still owed on those accounts. The October 15 due date for fee payment is being changed to November 15 to allow more time for the customers to pay these fees. Additional language is also being added to indicate the current practice of turning over delinquent accounts to State Collections for further action.

Organic Air Emission Standards for Tanks. Surface Impoundments and Containers-Postponement of the Effective Date

Colorado currently operates an authorized hazardous waste management program under the federal Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. sections 6901 to 6992. The state's program is equivalent to and consistent with the federal hazardous waste program established by the U.S. Environmental Protection Agency ("U.S. EPA") pursuant to RCRA. To maintain its authorization to operate its state program in lieu of the U.S. EPA operating a federal program, Colorado must adopt state requirements equivalent to and consistent with the overlying federal requirements. Further, while the state has the authority to be more stringent than the federal program, only where there has been a clear state need to address a specific hazardous waste management issue in Colorado has the Hazardous Waste Commission adopted state program requirements which were more stringent than the overlying federal requirements.

At the April 18, 1995 Hazardous Waste Commission meeting the Commission adopted air standards that apply to owners and operators of permitted hazardous waste treatment, storage and disposal facilities (TSDF) and certain hazardous waste generators accumulating waste on-site in RCRA permit-exempt tanks and containers. The air emission standards adopted by the Commission were intended to be and were equivalent to the federal air emission standards adopted by the U.S. EPA. In adopting the state air emission standards the Commission relied in large part upon the basis expressed by the U.S. EPA in adopting the federal air emission standards. The effective date for both the state and federal air emission standards was to be December 6, 1995.

On November 13, 1995, U.S. EPA postponed the effective date of the federal air emission standards until June 6, 1996. (60 FR 56952) This extension of the federal effective date has created the situation where, if the state effective date is not extended, the state program will inadvertently become more stringent than the federal program. Such a result was certainly not the intent of the Commission in originally promulgating the state emission standards. Further, during this six month extension of the federal effective date, the U.S. EPA will also be considering certain amendments to the federal air emission standards to increase compliance flexibility and, if found to be warranted, to reduce certain regulatory requirements. It is likely that amendments will be made to the federal air emission standards during this process, thereby creating further distinctions between the state and federal programs. In light of U.S. EPA action and the information it will be reviewing, the Commission will also be considering whether the state air emission standards should be amended.

The Commission believes that requiring compliance with the state air emission standards before any overlying federal effective date places an unnecessary burden upon the regulated community in Colorado. The creation of such a situation was not the intent of the Commission in originally promulgating the air emission standards which the U.S. EPA, and the Commission, may amend during the six month extension of the federal effective date is unwarranted.

On November 28, 1995, the Commission held an emergency rulemaking hearing and extended the effective date of the state air emission standards for 90 days or until a final rule-making hearing could be held.

These amendments to 6 CCR 1007-3, § § 264.1080, 265.1080 and 265.1082 extending the effective date for 6 months provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

A final rulemaking hearing was held on January 16, 1996 and the six month extension of state air emission standards, until June 6, 1996, was formally adopted.

Testing and Monitoring Activities

Section 260.11 is being amended at this time by revising the "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" reference to include the reference to Update IIB. This amendment clarifies the temperature requirement for pH measurements of highly alkaline wastes and adds Method 9040B (pH Electrometric Measurement) and Method 9045C (Soil and Waste pH) to "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846. This amendment will provide a better and more complete analytical technology for RCRA in testing in support of hazardous waste identification under the corrosivity characteristic (§ 261.22).

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 60 FR 17001-17004, April 4, 1995.

Amendment of § 265.1033

Section 265.1033 is being amended at this time by revising paragraph (j)(2) and adding paragraphs (l) through (l)(3). These amendments were part of the Environmental Protection Agency's "Organic Air Emission Standards for Tanks, Surface Impoundments, and Containers" final rule published in the Federal Register on December 6, 1994 (59 FR 62896-62953), but were inadvertently excluded from the air emission control standards adopted by the Hazardous Waste Commission at their April 18, 1995 hearing. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 59 FR 62896-62953, December 6, 1994.

Statement of Basis and Purpose - Rule-making Hearing of April 16, 1996

8.23 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 261, 268 and 100 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

RCRA Expanded Public Participation

These amendments enhance public participation in the hazardous waste facility permitting process for facilities that store, treat, or dispose of hazardous wastes by providing earlier opportunities for public involvement in the process and expanding public access to information throughout the permitting process and the operational lives of facilities.

Section 100.11(f) of these amendments requires a prospective applicant to hold an informal public meeting before submitting an application for a RCRA permit. Section 100.11(f) also requires the applicant to advertise the meeting in the newspaper, through a broadcast announcement (e.g., by radio or television), and on a sign posted at or near the property. This meeting will provide a chance for the facility to inform the community, and the community to interact with and provide input to a facility, before the owner or operator of the facility submits a permit application.

Section 100.506(a)(1)(vii) requires the Director to provide public notice that a part B permit application has been submitted to the Department and is available for review. Section 100.506(f) gives the Director the authority to require a facility owner or operator to set up an information repository at any time during the permitting process or life of the permit. The repository will hold all information and documents that the Director determines are necessary to fulfill the purposes for which the repository was established.

The Commission has for the most part adopted state analogs to the federal requirements in 40 CFR § § 124.31, 124.32, and 124.33 regarding public participation in the hazardous waste facility permitting process which are equivalent to the federal requirements. In the following circumstances the Commission has however adopted state analogs which are more stringent than the federal requirements regarding public participation in the hazardous waste facility permitting process. These more stringent state provisions include:

(1) State analog § 100.11(f)(2) which provides guidance to the applicant on the content of the pre-application public meeting by requiring the applicant to describe the facility "in sufficient detail to allow the community to understand the nature of the operations to be conducted at the facility."

(2) State analogs § 100.11(f)(3) and § 100.41(a)(22) which require the applicant to submit a stenographic or electronic record in addition to a "summary" of the pre-application meeting as a component of the Part B permit application.

(3) The public notice requirements of State analog § 100.11(f)(4). At the present time, federal regulations 40 CFR § § 124.31(d)(1)(i) and (iii) simply require the applicant to publish a notice as a display advertisement without specifying a publication frequency, and to broadcast the notice at least once on at least one local radio or television station. To ensure that the notice is more effectively disseminated, the Hazardous Waste Commission (the Commission) is incorporating language from the preamble of the December 11, 1995 final rule (60 FR 63117-63434) into the state analogs to these federal requirements expanding on what constitutes an adequate display ad. The Commission is requiring that the applicant: 1) publish the display advertisement in a newspaper of general circulation and the newspaper of record in the county that hosts the proposed location of the facility everyday of publication for a period of one week; and 2) Broadcast the notice on at least one local radio or television station one time per day for a period of one week.

The Commission expects that applicants and permit holders will make a good faith effort to announce the pre-application meeting to as many members of the affected community as possible. In an effort to reach neighboring communities that may have a potential interest in the facility, the Commission encourages facilities to place advertisements in free newspapers and community bulletins of the host and neighboring communities; and to place additional signs in nearby commercial, residential, or downtown areas. The signs should be similar in size to zoning notice signs required by local zoning authorities. Additional outreach measures might include mailings to area residents, adjacent property owners, and neighborhood associations.

The Commission has adopted state requirements that make public participation requirements applicable to all Part B permit applications which were previously only applicable to hazardous waste incinerator permits applications. This has made the specific § 100.41(b)(5)(v) pre-application public participation provisions applicable to hazardous waste incinerators unnecessary and they have therefore been deleted.

The Commission is not adopting the revisions made to 40 CFR § 270.62, "Hazardous waste incinerator permits." The Commission has already incorporated public participation provisions that are more stringent than the federal requirements when they adopted the technical and procedural standards related to permitting and operation of hazardous waste incinerators at their May 16, 1995 rule making hearing.

The Commission is also not adopting the revisions made to 40 CFR § 270.66, "Permits for boilers and industrial furnaces burning hazardous waste." Colorado has not adopted a state analog to 40 CFR § 270.66 at this time. There are currently no BIFs seeking a permit or operating in Colorado. Operation of these devices is regulated in Colorado by the U .S. Environmental Protection Agency.

The main benefit of the expanded public participation rule is to provide earlier opportunities for public involvement and expand public access to information throughout the permitting process and the operational lives of facilities. The Department believes that these requirements will give applicants and the Department a better opportunity to address public concerns in making decisions about the facility and in subsequent permitting activities. Providing the public with an expanded role in the permit process, by promoting community participation and input throughout the permitting process, will also help foster continued community involvement after facilities become permitted.

It should be noted that the expanded public participation rule does not require hazardous waste facilities already involved in the permitting process to step backwards in the process to comply with the preapplication provisions of the new requirements. Instead, the expanded public participation rule applies to a facility according to what stage of the process the facility is in on the effective date of these regulations. A facility that applies for a permit after the effective date of these regulations must comply with the expanded public participation requirements. Existing facilities that apply for renewal of permits for hazardous waste management units after the effective date of these regulations must also comply with the expanded public participation requirements if the renewal application is proposing a significant change in facility operations.

Except for the more stringent provisions noted above, this Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 60 FR 63417-63434, December 11, 1995.

Table of Contents Revisions

The table of contents for Parts 260 and 261 are being revised and updated at this time to reflect new regulations that were recently adopted by the Hazardous Waste Commission. The table of contents for Part 260 is being amended by adding a listing for § 260.23 “Petitions to amend Part 273 to include additional hazardous wastes”. The table of contents for Part 261 is being amended at this time by adding a listing for § 261.9 “Requirements for Universal Waste”.

Amendment of the Universal Waste Handler definition in § 260.10

This amendment corrects an inadvertent omission by revising the definition of “Universal Waste Handler” in § 260.10 to match the definition of “Universal Waste Handler” that is found in § 273.6. Subparagraph (b)(1) of the definition of “Universal Waste Handler” in § 273.6 was revised as part of the amendments adding aerosol cans to the Part 273 Standards for Universal Waste Management. A conforming change is now being made to § 260.10.

Amendment of § 261.4(b)(10)

Paragraph (b)(10) of § 261.4 is being amended at this time by replacing the reference to “6 CCR 1007-5 Part 280” with the proper reference citation of “40 CFR Part 280” as the correct location of the technical standards and corrective action requirements for owners and operators of underground storage tanks.

Amendment of § 268.1

Section 268.1 is being amended at this time by revising subparagraphs (f)(1) through (f)(3), and adding subparagraph (f)(4). Subparagraph (f)(4) adds aerosol cans to the list of universal wastes for which handlers and transporters of such universal wastes are subject to regulation under the Part 273 Standards for Universal Waste Management.

Statement of Basis and Purpose - Emergency Rulemaking Hearing of June 5, 1996

8.24 Basis and Purpose.

These amendments to 6 CCR 1007-3, § § 264.1080, 265.1080 and 265.1082 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S. and pursuant to the emergency rule provisions in § 24-4-103(6), C.R.S.

Organic Air Emission Standards for Tanks Surface Impoundments and Containers-Postponement of the Effective Date

Colorado currently operates an authorized hazardous waste management program under the federal Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. sections 6901 to 6992. The state's program is equivalent to and consistent with the federal hazardous waste program established by the U.S. Environmental Protection Agency ("U.S. EPA") pursuant to RCRA. To maintain its authorization to operate its state program in lieu of the U.S. EPA operating a federal program, Colorado must adopt state requirements equivalent to and consistent with the overlying federal requirements. Further, while the state has the authority to be more stringent than the federal program, only where there has been a clear state need to address a specific hazardous waste management issue in Colorado has the Hazardous Waste Commission adopted state program requirements which are more stringent than the overlying federal requirements.

At the April 18, 1995 Hazardous Waste Commission meeting the Commission adopted air standards that apply to owners and operators of permitted hazardous waste treatment, storage and disposal facilities (TSDF) and certain hazardous waste generators accumulating waste on-site in RCRA permit-exempt tanks and containers. The air emission standards adopted by the Commission were intended to be and were equivalent to the federal air emission standards adopted by the U.S. EPA. In adopting the state air emission standards the Commission relied in large part upon the basis expressed by the U.S. EPA in adopting the federal air emission standards. The effective date for both the state and federal air emission standards was to be December 6, 1995.

On November 13, 1995, U.S. EPA postponed the effective date of the federal air emission standards until June 6, 1996. (60 FR 56952). The Hazardous Waste Commission held an emergency rulemaking hearing on November 28, 1995 to extend the effective date of the state air emission standards for 90 days or until a final rule-making hearing could be held. A final rulemaking hearing was held on January 16, 1996 and the six month extension of state air emission standards, until June 6, 1996, was formally adopted.

The Department has received notification from EPA that the effective date of the federal Subpart CC air emission standards will be further extended until October 6, 1996. This extension of the federal effective date has again created the situation where, if the state effective date is not extended, the state program will inadvertently become more stringent than the federal program. The Commission believes that requiring compliance with the state air emission standards before any overlying federal effective date places an unnecessary burden upon the regulated community in Colorado. The creation of such a situation was not the intent of the Commission in originally promulgating the state air emission standards. Further, during this additional extension of the federal effective date, the U.S. EPA will also be considering certain amendments to the federal air emission standards to increase compliance flexibility and, if found to be warranted, to reduce certain regulatory requirements. It is likely that amendments will be made to the federal air emission standards during this process, thereby creating further distinctions between the state and federal programs. In light of U.S. EPA action and the information it will be reviewing, the Commission will also be considering whether the state air emission standards should be amended.

Based on the above the Commission finds that the immediate adoption of an extension of the state effective date for the state air emission standards adopted by the Commission at its January 16, 1996 hearing is imperatively necessary for the preservation of public health, safety or welfare. Such an extension is also necessary to the maintenance of state consistency with federal environmental requirements which was the intent of the Commission. Further, the Commission finds that compliance with the otherwise applicable notice and hearing requirements of the State Administrative Procedure Act would prevent the Commission from extending the effective date of the state air emission standards prior to the current June 6, 1996 effective date and, therefore, compliance with such requirements would be contrary to the public interest.

The Commission has today extended, for a period not to exceed ninety days, the effective date of the air emission standards as adopted at its January 16, 1996 hearing, or until such time when the Commission adopts a final rule extending the effective date, which ever occurs earliest. A permanent rulemaking hearing for the rules will be held on August 20, 1996.

Statement of Basis and Purpose - Rule-making Hearing of June 18, 1996

8.25 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 264, 265, 268, 273, and 6 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

Hazardous Waste Management: Liquids in Landfills

These amendments provide increased flexibility to the regulated community by adding a third test to § § 264.314 and 265.314 of the existing state regulations for demonstrating that a sorbent is non-biodegradable. The test, OECD 301B (Modified Sturm Test) for determining the biodegradability of organic chemicals in water, was recently adopted by the Organization for Economic Cooperation and Development (OECD) after recommendation by an OECD Expert Group on Degradation/Accumulation. The Environmental Protection Agency concluded that the test is applicable, that it effectively measures the biodegradability of sorbents, and that its use in determining biodegradability of sorbents in a hazardous waste landfill will not have a negative environmental impact.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 60 FR 35703-35706, July 11, 1995.

Amendment of § § 268.36(d) and 268.36(e)

These amendments correct errors which occurred when the land disposal restrictions for newly listed wastes and hazardous debris regulations of August 18, 1992 (57 FR 37194-37282) were adopted by Colorado. Colorado inadvertently omitted some wording when adopting state analogs to 40 CFR § 268.36(d) and § 268.36(e). These amendments make the corresponding additions to the state analogs to ensure equivalency with the applicable federal regulations.

Amendment of §268.36(g)

Section 268.36(g) was a time-limited provision that has expired and is no longer in effect. For this reason, the language in § 268.36(g) is being deleted, and paragraph (g) is being reserved.

Amendment of § 273.2(c)(2)(i)

This amendment corrects a typographical error which exists in subparagraph (c)(2)(i) of § 273.2 by replacing “Aerosol cans”with “Thermostats”.

Amendment of § 6.04

Section 6.04 is being amended by revising paragraph (a) to reflect the annual Commission fees to be assessed for fiscal year 1996-97.

Statement of Basis and Purpose - Rulemaking Hearing of August 20, 1996

8.26 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 101, Part 261 Appendix IX, and § § 264.1080, 265.1080 and 265.1082 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of Part 261 Appendix IX to Conditionally Delist F006 Hazardous Waste Generated by NTI A Division of Colorado Springs Circuits Inc.

Appendix IX of Part 261 is being amended at this time to conditionally delist F006 hazardous waste generated at NTI, A Division of Colorado Springs Circuits, Inc. (“NTI”) in Colorado Springs, Colorado. This delisting will allow NTI to dispose of its waste at a Solid Waste Landfill which meets the requirements of the Colorado Solid Waste Regulations 6 CCR 1007-2, provided it complies with the conditions of the delisting.

NTI operates a commercial electroplating operation located in Colorado Springs, Colorado. The facility generates a wastewater sludge which is classified as a F006 listed hazardous waste. The F006 hazardous waste listing in § 261.31 describes wastewater treatment sludge that is generated from electroplating operations. The basis for each hazardous waste listing is described in Appendix VII of Part 261. Each listing is based on hazardous constituents which are generally contained in wastes described by the listing. The hazardous constituents which formed the basis for the F006 listing include cadmium, hexavalent chromium, nickel, and cyanide (complexed).

The wastewater treatment system at the plant handles approximately 60,000 gallons of wastewater a day producing a dry sludge weight of approximately 14 tons per month. Industrial wastewater produced from the electroplating operation at the facility is collected by containment trenches which flow to large holding tanks. Wastewater proceeds through a series of processes in which the pH is adjusted, and metals are precipitated out with a reducing agent. The metals are then filtered out and concentrated using a microfiltration device and concentrate tank. Ultimately, the concentrated solids are processed through a filter press to remove the liquid and form the F006 sludge cake.

Analytical sampling of the F006 sludge was conducted prior to the submission of the waste delisting petition. The electroplating process does not significantly change on a day-to-day basis. The collected samples adequately represent the waste stream. The Hazardous Materials and Waste Management Division at the Colorado Department of Public Health and Environment (the Division), evaluated the sampling results and the request for petitioning of the waste in accordance with § 260.22. This evaluation was provided to the Commission.

The results of the waste sampling indicated that the waste did not contain detectable concentrations of either cadmium or cyanide. The results of the analysis did indicate that the waste contained detectable concentrations of both nickel and chromium. However, based on health based risk assessment calculations derived using the general assumptions outlined in the Division' s current risk assessment policy, the waste did not contain concentrations of these constituents at levels which would be considered harmful to human health or the environment.

Analytical sampling of the waste also indicated that the waste contained detectable concentrations of arsenic, lead, mercury, and copper. Based on health based risk assessment calculations and average background soil conditions, the Division determined that the waste did not contain concentrations of lead, mercury, or arsenic at levels which would be considered harmful to human health or the environment. However, the results of the health based risk assessment indicated that the concentration of copper in the waste did pose an unacceptable risk to human health and the environment if humans were directly exposed to the waste in a residential setting. Although the assessment showed that the level of copper in the waste was too high to support an unconditional delisting of the waste, further evaluation of the physical and chemical nature of the waste indicated that the waste did not pose an unacceptable risk to human health or the environment if subject to certain conditions regarding its handling and disposal in a solid waste landfill.

The potential for constituents in the waste to leach out and contaminate groundwater was evaluated by the Division using TCLP analytical tests which measure the maximum potential for constituents to be released from the waste. The results of the TCLP analysis indicated that none of the hazardous constituents in the waste showed any chemical potential to leach out of the waste, and that nickel and copper in the waste showed only small potentials to be leached from the waste which are adequately protected against in a solid waste landfill setting.

Further, the results of the waste sampling indicated that the waste sludge does not contain any organic constituents. Consideration of the potential health effects caused by exposure to these constituents was therefore not considered in evaluating the petition by the Division. This delisting is being granted under conditions which specify disposal requirements, specify recordkeeping requirements, and storage requirements for the delisted sludge. Conditional delisting of the waste also prohibits any major changes to the electroplating process or wastewater treatment process without prior notification, evaluation, and approval by the Division.

This delisting does not apply to waste which demonstrates “significant changes” as defined in Delisting #002 in Part 261, Appendix IX-Wastes excluded under § 260.20 and § 260.22(d), or if any of the conditions specified in Part 261, Appendix IX for this delisting are not met. Should either of these occur, the waste is and must be managed as a hazardous waste. While the Division has approved a conditional delisting for this specific waste at this specific site, the findings and criteria associated with the approval are unique. Other petitions for delisting, even if similar in material or use, will be reviewed by the Division on a case-by-case basis.

Organic Air Emission Standards for Tanks Surface Impoundment and Containers-Postponement of the Effective Date

Colorado currently operates an authorized hazardous waste management program under the federal Resource Conservation and Recovery Act (“RCRA”), 42 U.S.C. sections 6901 to 6992. The state’s program is equivalent to and consistent with the federal hazardous waste program established by the U.S. Environmental Protection Agency (“U.S. EPA”) pursuant to RCRA. To maintain its authorization to operate its state program in lieu of the U.S. EPA operating a federal program, Colorado must adopt state requirements equivalent to and consistent with the overlying federal requirements. Further, while the state has the authority to be more stringent than the federal program, only where there has been a clear state need to address a specific hazardous waste management issue in Colorado has the Hazardous Waste Commission adopted state program requirements which are more stringent than the overlying federal requirements.

At the April 18, 1995 Hazardous Waste Commission meeting the Commission adopted air standards that apply to owners and operators of permitted hazardous waste treatment, storage and disposal facilities (TSDF) and certain hazardous waste generators accumulating waste on-site in RCRA permit-exempt tanks and containers. The air emission standards adopted by the Commission were intended to be and were equivalent to the federal air emission standards adopted by the U.S. EPA. In adopting the state air emission standards the Commission relied in large part upon the basis expressed by the U.S. EPA in adopting the federal air emission standards. The effective date for both the state and federal air emission standards was to be December 6, 1995.

On November 13, 1995, the U.S. EPA postponed the effective date of the federal air emission standards until June 6, 1996. (60 FR 56952). The Hazardous Waste Commission held an emergency rulemaking hearing on November 28, 1995 to extend the effective date of the state air emission standards for 90 days or until a final rule-making hearing could be held. A final rulemaking hearing was held on January 16, 1996 and the six month extension of the state air emission standards, until June 6, 1996, was formally adopted.

On June 5, 1996, the U.S. EPA issued another delay to the effective date of the federal Subpart CC air emission standards. The new effective date will be October 6, 1996 for all provisions of the standards, including the applicability of Part 265, Subparts AA, BB, and CC to 90-day accumulations units at hazardous waste generators, the applicability of subparts AA, BB, and CC to RCRA permitted units, and the applicability of the final standards to tanks in which waste stabilization activities are performed. All other compliance dates for the air emission standards remain as published in the December 6, 1994 final rule (59 FR 62896).

This extension of the federal effective date has again created the situation where, if the state effective date is not extended, the state program will inadvertently become more stringent than the federal program. The Commission believes that requiring compliance with the state air emission standards before any overlying federal effective date places an unnecessary burden upon the regulated community in Colorado. The creation of such a situation was not the intent of the Commission in originally promulgating the state air emission standards.

To maintain state consistency with the federal environmental requirements, the Commission held an emergency rulemaking hearing on June 5, 1996 and extended the effective date of the state air emission standards as adopted at its January 16, 1996 hearing for a period of 90 days or until a final rulemaking could be held.

At its rulemaking hearing on August 20, 1996, this rule was again considered by the Commission to make permanent the final effective date of October 6, 1996. At that hearing, however, the Commission received information from the Division indicating that it is likely that the EPA will again extend the effective date of the federal rule, or will propose substantive amendments to the rule. These amendments are anticipated to provide certain compliance options for waste determination procedures and for container standards that are not currently available. In addition, these revisions would reduce the monitoring, record keeping, and reporting requirements for affected tanks, surface impoundments, and containers. The Commission, therefore, decided to not adopt an effective date for the rule, preferring instead to wait until EPA has taken final action. Once EPA has taken final action, the Commission will notice and conduct a rule-making hearing to consider any amendments to the rule that may be necessary and to adopt an effective date for the rule.

Part 101 Compliance Advisory Process

The amendments to Part 101 of the Colorado Hazardous Waste Regulations, 6 CCR 1007-3, are adopted by the Hazardous Waste Commission pursuant to section 25-15-302 of the Colorado Hazardous Waste Act.

These amendments to Part 101 include recommendations made by the Hazardous Materials and Waste Management Division and the Part 101 Critical Review Team to adopt a new Compliance Advisory process for Department enforcement actions. The amendment also include necessary conforming amendments to the Regulations to reflect changes made in 1992 to the Colorado Hazardous Waste Act.

As part of a department-wide initiative, Critical Review Teams ("CRTs") were formed to review all existing regulations for the purpose of determining whether the regulations are necessary or if the same goals could be accomplished in a non-regulatory manner. All CRTs, including the Part 101 CRT, consist of representatives from the affected Division, the regulated community and the public. An effort was also made to include a team member from outside of the affected area to provide a fresh perspective on the issues under review.

The Part 101 CRT's review focused on the effectiveness and timeliness of the various mechanisms set forth in the existing Part 101 enforcement process by the Division, including warning letters, notices of violations and various forms of compliance orders, and the opportunity for establishing some compliance assistance mechanisms for the regulated community.

The new Compliance Advisories replace warning letters and notices of violation and are intended to be issued at the time of the inspection where possible or shortly thereafter.

This new process is intended to reduce the time between the inspection and the facility's notification of possible compliance issues, including violations of the Act and the Regulations, thereby leading to more timely resolution of compliance issues and compliance with the requirements of the Act and the Regulations. In most cases, the issuance of a Compliance Advisory should precede the issuance of a compliance order or the filing of a civil enforcement action by the Department. However, the Commission recognizes that there will be instances where the Division will need to proceed directly to the issuance of a compliance order or the filing of a civil enforcement action. The amendments to Part 101 allow the Division to issue a compliance order or file a civil enforcement action without issuing a Compliance Advisory. No substantive changes were suggested or adopted regarding the issuance of compliance orders or the filing of civil enforcement actions by the Division.

The Compliance Advisory process also provides increased opportunities for the Division to provide more effective compliance assistance to the regulated community, both at the time of the inspection and after the issuance of a compliance order. In fact, the Compliance Advisory process includes provisions which allow the Division and the regulated community to agree at the time of the inspection to the actions that need to be taken and the time frames for compliance with the Act and the Regulations.

Providing the regulated community with earlier notice of possible compliance problems and more compliance assistance should promote the Division' s and the regulated community' s efforts to achieve full compliance with the requirements of the Hazardous Waste Act and its implementing regulations in a more timely, cooperative and efficient manner.

After the issuance of a compliance advisory the recipient should also be provided timely notice whenever the Division determines that there were no violations of state hazardous waste requirements or that compliance with some or all of the violations addressed in the Compliance Advisory have been achieved. In that regard, No Violation or No Further Action letters should be sent as soon as possible after the Division has made such determinations. In addition, a No Further Action letter should also contain a statement informing the person of the possibility of administrative or civil penalties for the violations of state hazardous waste requirements addressed in the Compliance Advisory and, where a decision on penalties has been made, the Division should indicate whether it will be seeking penalties for the violations addressed in the Compliance Advisory.

As part of the rule-making proceeding for the adoption of the amendments to Part 101, the Commission reviewed the Compliance Advisory form developed by the Division and a copy is attached hereto. The Division intends on using the form, or a similar document, in its implementation of the amendments to Part 101. The Commission believes that the form, and the information contained therein, is consistent with its intent in adopting the amendments to Part 101, including the distinction drawn by the form between regulatory "Deficiencies," "Potential Deficiencies" and "Concerns Noted." The Commission also recognizes that, if the Compliance Advisory is issued at the time of an inspection, the Division will request that the person sign the Compliance Advisory to acknowledge its contents and receipt. Such a signature, however, is not and is not to be construed as an admission on behalf of the person that any violations of state hazardous waste requirements have occurred. The attachment of the form is not intended to preclude the Division from making modifications to the form necessary for the implementation of the compliance advisory process as long as it is not contrary to the intent of the Commission in adopting the amendments to Part 101.

It should be noted that regardless of which compliance advisory or enforcement action is taken, the Division will continue to leave a copy of its notice of inspection with the facility.

HAZARDOUS MATERIALS AND WASTE MANAGEMENT DIVISION
COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
4300 CHERRY CREEK DRIVE SOUTH, DENVER, CO 80222-1530

COMPLIANCE ADVISORY

FACILITY:	EPA ID #:	DATE:
	ADDRESS:	

This Compliance Advisory provides notice related to information gained during inspection of the above named facility on the date shown. We advise you that the inspector(s) believes that the "Deficiencies" listed below are violations of Colorado's hazardous waste laws and the "Potential Deficiencies" listed below may be violations of Colorado's hazardous waste laws. Division personnel will review the facts established during this inspection and this notice may be revised to include additions or clarifications as a result of that review.

Please be aware that you are responsible for complying with the State hazardous waste regulations and that there are substantial administrative and civil penalties for failing to do so. Section 25-15-309, C.R.S. provides that any person who violates Section 25-15-308, C.R.S., which includes the Colorado Hazardous Waste Act ("the Act"), Sections 25-15-101 to 316, C.R.S., and the Colorado Hazardous Waste Regulations, 6 CCR 1007-3, may be subject to an administrative penalty of not more than $15,000 per violation per day during which such violation occurs or to a civil penalty of not more than $25,000 per violation per day during which such violation occurs. The issuance of this Compliance Advisory does not limit or preclude the Department from pursuing its enforcement options concerning this inspection including issuance of a Compliance Order and assessment of penalties. Also, this Compliance Advisory does not constitute a bar to enforcement action for conditions that the inspectors did not observe or evaluate, or conditions found during future inspections of your facility.

To avoid additional enforcement action or reduce the penalties described above you must either correct the "Deficiencies" and "Potential Deficiencies" within a reasonable time, or you must demonstrate to the Division that the "Deficiencies" and "Potential Deficiencies" are not violations of Colorado's hazardous waste laws.

To close out this Compliance Advisory, we encourage you to contact the Compliance Officer listed below, and where necessary, schedule a meeting:

A) To discuss the Compliance Advisory and answer any questions you may have;
B) To develop a schedule for correcting the "Deficiencies" and "Potential Deficiencies"; or
C) To submit information necessary to successfully show that the "Deficiencies" and "Potential Deficiencies" (or any of them) are not violations of Colorado's hazardous waste laws.

Compliance Officer
Hazardous Materials and Waste Management Division
Colorado Department of Public Health & Environment
Mail Code: HMWMD-HWC-B2
4300 Cherry Creek Drive South
Denver, Colorado 80222-1530
Tel: (303) 692-3300

Failure to respond in a timely fashion to this Compliance Advisory will be considered in any subsequent enforcement action and the assessment of administrative and/or civil penalties.

COMPLIANCE ADVISORY

PAGE 2 OF _____

FACILITY:	EPA ID.#:	DATE:

DEFICIENCIES, POTENTIAL DEFICIENCIES, OR CONCERNS NOTED

(MAY BE CONTINUED ON ADDITIONAL PAGES)

I acknowledge that the "Deficiencies" and "Potential Deficiencies" listed above have been identified for me and I have been advised to contact the above-listed Compliance Officer to close out this Compliance Advisory. I have also been advised that failure to respond in a timely fashion to this Compliance Advisory will be considered in the issuance of any subsequent enforcement action and the assessment of greater administrative and/or civil penalties.

_____

Facility Representative

Statement of Basis and Purpose - Rule-making Hearing of November 19, 1996

8.27 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 260 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

Addition of § 260.12 Sampling and Analytical Methods.

The purpose of this regulation, Section 260.12, is to ensure that analytical data collected are reflective of sample composition; have the appropriate level of accuracy, sensitivity and precision for the purpose of the investigation or activity; and that the sampling and analytical methods used to generate the data are considered safe. This regulation formalizes the administrative process the Department uses in approving sampling and analytical procedures in certain instances when sampling and analysis is required by these regulations, a permit, or an order issued by the Department. The Hazardous Waste Commission recognizes that because of certain location, waste or contamination-specific criteria and varying needs for which sampling and analysis may be required, a variety of different sampling and analytical techniques may be appropriate. The Commission also recognizes that, in addition to those methods referred to in the regulations, other equally valid sampling and analytical methods may exist that persons managing hazardous waste or contaminated media or debris may want to use in light of location, waste or contamination-specific criteria.

Alternative sampling and analytical methods and equipment are necessary where the conformity with the prescribed method may result in collection of data that is not accurate or does not have sufficient sensitivity or precision due to the physical and chemical properties of the materials involved. Section 260.12 provides that determinations to use different sampling or analytical methods or equipment may be made on a situation-specific basis in cases where the regulations do not mandate the use of a particular procedure. Section 260.12 specifically recognizes the Department's authority to approve methods that are adequate to achieve the desired performance objectives to assure that appropriate sensitivity, accuracy, precision, and safety are achieved.

To ensure that appropriate methodologies are being employed to achieve adequate analytical performance objectives, the Department evaluates sampling and analysis procedures based upon the method performance as compared to the specific objectives of the investigation. The specific criteria evaluated include: accuracy, precision, sensitivity, and safety weighed against the project's goals. Other factors that are considered, when appropriate, include laboratory practices, cost, availability, and relevant historical data, when available. Conducting such reviews assists the Department in its goal of ensuring that data reflective of sample composition and an acceptable degree of scientific certainty is generated through the application of consistent Quality Control.

Implementation of this rule should also decrease the amount of questionable or inaccurate data produced, and consequently the amount of resampling and reanalysis necessary, thereby reducing the overall cost to all persons involved.

The procedures outlined in Section 260.12 do not apply where the hazardous waste regulations specify a particular sampling and analytical method, as outlined below. Any changes to specified methods must be approved through a rulemaking petition as provided in § § 260.20 and 260.21. As stated in the Federal Register, Vol. 60, No.9, Jan. 13, 1995, pp.3089 and 3090, and incorporated herein by reference:

Several of the hazardous waste regulations under subtitle C of RCRA require that specific testing methods described in SW-846 be employed for certain applications. Any reliable analytical method may be used to meet other requirements in 40 CFR part 260 through part 270.

Mandatory usage of specific testing methods include: 1) Section 260.22(d)(1)(i); 2) Section 261.22(a)(1) and (2); 3) Section 261.24(a); 4) Section 261.35(b)(2)(iii)(A); 5) Sections 264.190(a), 264.314(c), 265.190(a), and 265.314(d); 6) Sections 264.1034(d)(1)(iii), and 265.1034(d)(1)(iii); 7) Sections 264.1063(d)(2), and 265.1063(d)(2); 8) Section 266.106(a); 9) Section 266.112(b)(1) and (2)(i); 10) Section 268.32(i); 11) Sections 268.40(a), (b), and (f), 268.41(a), and 268.43(a); 12) Section 268.7(a); 13) Sections 270.19(c)(1)(iii) and: (iv), and 270.62(b)(2)(i)(C) and (D); and 14) Sections 270.22 (a)(2)(ii)(B) and 270.66(c)(2)(i) and (ii).

Statement of Basis and Purpose - Rule-making Hearing of January 21, 1997

8.28 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 99 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

Revision of Part 99 Notification Rules

These amendments to Part 99 of the Colorado Hazardous Waste Regulations, 6 CCR 1007-3, are adopted by the Hazardous Waste Commission pursuant to section 25-15-302 of the Colorado Hazardous Waste Act.

These amendments include recommendations made by the Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division and the Part 99 Critical Review Team. As part of a department-wide initiative, Critical Review Teams (“CRTs”) were formed to review all existing regulations for the purpose of determining whether the regulations are necessary or if the same goals could be accomplished in a non-regulatory manner. All CRTs, including the Part 99 CRT, consist of representatives from the affected Division, the regulated community and the public. An effort was also made to include a team member from outside of the affected area to provide a fresh perspective on the issues under review.

The Part 99 CRT's review focused on the effectiveness of the existing notification requirements for persons generating, transporting or owning or operating a hazardous waste management facility. The only issue with regard to notification identified by the CRT was the lack of an express requirement that persons notify the Department when their activities and/or location change after filing their notification of hazardous waste activity. The amendment to Part 99 requires persons to notify the Department annually if their activities and/or location change. The notification is required at the time their Hazardous Waste Commission Fee is due.

Statement of Basis and Purpose - Rule-making Hearing of June 17, 1997

8.29 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 261, 262, 264, 265, and 100 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

Organic Air Emission Standards for Tanks Surface Impoundments and Containers

Colorado currently operates an authorized hazardous waste management program under the federal Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. sections 6901 to 6992. The state's program is equivalent to and consistent with the federal hazardous waste program established by the U.S. Environmental Protection Agency ("U.S. EPA") pursuant to RCRA. To maintain its authorization to operate its state program in lieu of the U.S. EPA operating a federal program, Colorado must adopt state requirements equivalent to and consistent with the overlying federal requirements. Further, while the state has the authority to be more stringent than the federal program, only where there has been a clear state need to address a specific hazardous waste management issue in Colorado has the Hazardous Waste Commission adopted state program requirements which are more stringent than the overlying federal requirements.

At the April 18, 1995 Hazardous Waste Commission meeting the Commission adopted air standards that apply to owners and operators of permitted hazardous waste treatment, storage and disposal facilities (TSDF) and certain hazardous waste generators accumulating waste on-site in RCRA permit-exempt tanks and containers. The Hazardous Waste Commission adopted these Subpart CC standards with an effective date of December 6, 1995 rather than the June 5, 1995 effective date that is listed in the December 12, 1994 final rule (59 FR 69826). The December 6, 1995 effective date was adopted to correspond with EPA's stated intention to grant an extension to the effective date of the Subpart CC Air Emission Standards until December 6, 1995. The air emission standards adopted by the Commission were intended to be and were equivalent to the federal air emission standards adopted by the U.S. EPA. In adopting the state air emission standards the Commission relied in large part upon the basis expressed by the U.S. EPA in adopting the federal air emission standards.

Since the Commission's adoption of the final Subpart CC rule (59 FR 69826, December 4, 1994) at its April 18, 1995 hearing, the EPA has published three Federal Register documents to delay the effective date of that rule. The first (60 FR 26828, May 19, 1995) revised the effective date of the standards to be December 6, 1995. The second (60 FR 56952, November 13, 1995) revised the effective date of the standards to be June 6, 1996. The third (61 FR 28508, June 5, 1996) further postponed the effective date for the rule requirements until October 6, 1996.

These extensions of the federal effective date created the situation where, if the state effective date was not extended, the state program would inadvertently become more stringent than the federal program. The Commission believed that requiring compliance with the state air emission standards before any overlying federal effective date places an unnecessary burden upon the regulated community in Colorado. The creation of such a situation was not the intent of the Commission in originally promulgating the state air emission standards.

To maintain state consistency with the federal environmental requirements, the Commission held an emergency rulemaking hearing on November 28, 1995 and a final rulemaking hearing on January 16, 1996 to adopt the new June 6, 1996 effective date. On June 5, 1996, the Commission held another emergency rulemaking hearing to extend the effective date of the state air emission standards for a period of 90 days or until a final rulemaking could be held.

At its rulemaking hearing on August 20, 1996 the Commission considered adopting the new federal effective date of October 6, 1996. At that hearing, however, the Commission received information from the Division indicating that it was likely that the EPA would again be extending the effective date of the federal rule, or would be proposing substantive amendments to the rule. These amendments were anticipated to provide certain compliance options for waste determination procedures and for container standards that are not currently available. In addition, these revisions would reduce the monitoring, record keeping, and reporting requirements for affected tanks, surface impoundments, and containers. The Commission, therefore, decided to not adopt an effective date for the rule, preferring instead to wait until EPA had taken final action. Once EPA had taken final action, the Commission would notice and conduct a rulemaking hearing to consider any amendments to the rule that may be necessary and to adopt an effective date for the rule.

On November 25, 1996, the EPA issued a final rule to amend and clarify the regulatory provisions of the final Subparts AA, BB, and CC air emission standards, and to clarify certain language in the preamble to the final rule. These amendments provide additional options for compliance that give owners and operators increased flexibility in meeting the requirements of the rules while still providing sufficient controls to be protective of human health and the environment. In addition, the November 25, 1996 rule suspended the applicability and implementation of Subpart CC of Part 264 and Part 265 from October 6, 1996, to December 6, 1996.

At this time, the Commission is adopting revisions to the state analogs to provide equivalency with the amendments of the November 25, 1996 rule (61 FR 59932). As part of these revisions, the Commission is adopting an effective date of December 6, 1996. Accordingly, § § 264.l080(b)(1), 264.1081(c), 265.1080(b)(1), 265.1081(c), and 265.1082(a) of 6 CCR 1007-3 have been revised to reflect this new effective date. The Commission is also making additional changes when adopting this rule. These additional changes include:

1) Addition of § § 264.1080(d) and 265.1080(d). These provisions stay the applicability of the Subpart CC standards specific to units managing wastes produced by certain organic peroxide manufacturing processes. These state analogs provide equivalency with the regulatory requirements of EPA as published in the Federal Register on September 29, 1995 (60 FR 50426).

2) Adding the additional clarifying language of “(approximately 26 gallons)” in § § 264.1086(b)(1)(i) & (b)(2); and 265.1087(b)(1)(i) & (b)(2).

3) Adding the additional clarifying language of “(approximately 119 gallons)” in § § 264.1086(b)(1)(i),(ii) & (iii); 264.1087(c)(5); 265.1087(b)(i), (ii) & (iii); and 265.1087(c)(5).

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 60 FR 50426-50430, September 29, 1995; at 61 FR 4903-4916, February 9, 1996; and at 61 FR 59932-59997, November 25, 1996.

Statement of Basis and Purpose - Rule-making Hearing of August 19, 1997

8.30 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 261, 262, 263, 264, 265, 267, 268 and 273 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

Land Disposal Restrictions Phase III - Decharacterized Wastewaters. Carbamate Wastes, and Spent Potliners

On February 16, 1996, the Environmental Protection Agency’s administrator signed the Phase III land disposal restrictions (LDR) rule. The most significant aspect of this rule was promulgation of treatment standards for characteristic wastes managed in systems regulated by the Clean Water Act (CWA) and in Class I injection wells regulated under the Safe Drinking Water Act (SDWA). These regulations also applied to zero-discharge systems that treat wastewater in a manner equivalent to that used by CWA dischargers (i.e., CWA-equivalent systems). However, on March 26, 1996, President Clinton signed into law the Land Disposal Flexibility Act of 1996 (PL 104-119), which changed the RCRA statute such that the above-mentioned treatment standards for characteristic wastes managed in CWA/CWA-equivalent/Class I SDWA systems became invalid.

As a result, on April 8, 1996, EPA promulgated the final Phase III rule (61 FR 15566-15660) and a notice withdrawing the CWA/CWA-equivalent/Class I SDWA system treatment standards (61 FR 15660-15668).

Subsequent to April 8, 1996, four technical amendments and corrections were published in the Federal Register. On February 19, 1997 (62 FR 7502-7600), EPA published an additional technical amendment to the LDR Phase III rule. This February 19, 1997 rule included updated and corrected versions of the tables "Treatment Standards for Hazardous Wastes" at § 268.40, and "Universal Treatment Standards" at § 268.48. These updated tables incorporate all the revisions to the treatment standards promulgated since the Phase III final rule, and should help eliminate confusion as to what levels of treatment must be achieved by the regulated community as they comply with the LDR requirements.

At this time, Colorado is revising its Part 268 Land Disposal Restrictions regulations to maintain equivalency with the federal LDR Phase III requirements. However, the Hazardous Waste Commission is not adopting the revisions made to § 268.1(c)(3) by the LDR Phase III rule. In the federal regulations, 40 CFR § 268.1(c)(3) provides for an exception to the land disposal restrictions if hazardous wastes are disposed of in injection wells. Colorado rules prohibit Class I injection wells. Because the state analogs do not provide for the injection well exception to land disposal restrictions, Colorado's requirements are more stringent than the applicable federal regulations.

The Commission is also not adopting the provision of 40 CFR § 268.40(g). This provision was issued by EPA as an "emergency revision" on August 26, 1996 (61 FR 43924-43931) that allows carbamate wastes to be treated using specified treatment methods prior to land disposal as an alternative to meeting the concentration based standards, but only for a period of one year (until August 26, 1997). Because this federal provision is about to expire, the Commission is reserving § 268.40(g) in the state analog to 40 CFR § 268.40(g).

On July 14, 1997, EPA issued a final rule that extended the national capacity variance for spent potliners from primary aluminum production (Hazardous Waste Number K088) for three months from the current treatment standard effective date of July 8, 1997 until October 8, 1997. To avoid the state program from inadvertently becoming more stringent than the federal program, § 268.39(c) of the state regulations is being revised to adopt the new effective date of October 8, 1997.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register on April 8, 1996 (61 FR 15566-15660); and amended on April 8, 1996 (61 FR 15660-15668), April 30, 1996 (61 FR 19117), June 28, 1996 (61 FR 33680-33691), July 10, 1996 (61 FR 36419-26421); August 26, 1996 (61 FR 43924-43931), February 19, 1997 (62 FR 7502-7600); and July 14, 1997 (62 FR 37694-37699).

Land Disposal Restrictions Phase IV - Treatment Standards for Wood Preserving Wastes Paperwork Reduction and Streamlining Exemptions from RCRA for Certain Processed Materials and Miscellaneous Hazardous Waste Provisions

This rule is one part of the collection of land disposal restrictions (LDR) rules known as "Phase IV." They are the latest in a series of LDR rules that establish treatment standards for newly listed and identified wastes, and that resolve other hazardous waste matters.

The major provisions of this rule include:

1) Finalizing the land disposal restrictions treatment standards for hazardous wastes generated from wood preserving operations (Waste Codes F032, F034 and F035).

2) Establishing combustion (defined at § 268.42, Table 1, CMBST) as an alternative compliance treatment standard option for dioxin and furan (D/F) constituents in nonwastewater and wastewater forms of F032.

3) Revising the treatment standard for chlorinated aliphatics waste (F024).

4) Amending the notification requirements of § 268.7 to require only a one-time notification, rather than with each shipment of hazardous waste. The one-time notification would apply to shipments of all restricted hazardous wastes, including lab packs.

5) Establishing an alternative treatment standard of POLYM (polymerization) for High-TOC (Total Organic Carbon) Ignitable D001 wastes originally intended as chemical components in the commercial manufacture of plastics. In the polymerization treatment process (POLYM), the wastes are reacted to produce a chemically stable plastic in the same manner that commercial plastics are formed.

6) Revising § 268.1(e) to clarify that the *de minimis* provision applies to characteristic wastes as well as commercial chemical products and intermediates.

7) Amending the definition of solid waste to exclude from RCRA jurisdiction two types of materials: processed scrap metal and containerized shredded circuit boards.

8) Cleaning up the LDR requirements of Part 268 to remove extraneous cross references, eliminate unneeded language, remove unneeded appendices, and other similar actions to eliminate confusion for the regulated community.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 62 FR 25998-26040, May 12, 1997.

Identification and Listing of Hazardous Wastes Amendments to Definition of Solid Waste Recovered Oil Exclusion Correction

This amendment to § 261.4(a)(13) corrects the text of a regulatory exclusion from the regulatory definition of solid waste for recovered oil which is inserted into the petroleum refining process. The current text of the exclusion contains a factual error as to the location in the refining process at which recovered oil can be inserted. The result of this error is to inappropriately restrict legitimate recycling of recovered oil. This amendment will restore the original intent of the rule, which was to condition the exclusion of recovered oil on that oil being reinserted into the petroleum process at a point where that process removes or will remove at least some contaminants.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 61 FR 13103-13106, March 26, 1996.

Imports and Exports of Hazardous Waste: Implementation of OECD Council Decision

This rule identifies the wastes, under RCRA, that are subject to a graduated system (green, amber, red) of procedural and substantive controls when they move across national borders within the Organization for Economic Cooperation and Development (OECD) for recovery. This rule seeks to make the transactions fully transparent and to prevent or minimize the possibility of such wastes being abandoned or otherwise illegally handled. These requirements will only apply to U.S. exporters and importers of RCRA hazardous wastes destined for recovery in OECD countries (except for Canada and Mexico; waste shipments to and from these countries will continue to move under the current bilateral agreements and regulations). Those U.S. exporters and importers transacting hazardous waste movements outside the scope of this rule will remain subject to EPA's current waste export and import regulations at 40 CFR Part 262, Subparts E and F. This rule does not increase the scope of wastes subject to U.S. export and import controls; it does, however, modify the procedural controls governing their export and import when shipped for recovery among OECD countries. This rule will assist in harmonizing the new OECD requirements, reducing confusion to U.S. importers and exporters and increasing the efficiency of the process.

Colorado is not required under federal law to adopt this rule. Like the export requirements at 40 CFR Part 262, Subpart E, the 40 CFR Part 262, Subpart H requirements will be administered by EPA and not the States because the exercise of foreign relations and international commerce powers is reserved to the Federal government under the Constitution. However, states are encouraged by EPA to incorporate these requirements into their regulations for the convenience of the regulated community and for completeness, particularly where a State has already incorporated the 40 CFR Part 262, Subparts E and F provisions into its regulations. The enforcement of the 40 CFR Part 262, Subpart H provisions remains EPA's responsibility even when States incorporate these requirements into their regulations. However, EPA recognizes that States play a key role in providing EPA with information on whether U.S. facilities designated to receive hazardous waste imports are authorized to manage specific wastes and in ensuring facility compliance with all applicable environmental laws and regulations.

The requirements in this rule apply to only those wastes identified or listed under the Federal program that are subject to Federal manifesting requirements. Thus, State-only wastes would not be subject to the import/export regulations addressed by this rule.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 61 FR 16290-16316, April 12, 1996.

Statement of Basis and Purpose - Rule-making Hearing of August 19, 1997

8.30 Basis and Purpose.

Listing of Mustard Agent as Waste Codes P909 and P910 in § 261.33(e)

These amendments to 6 CCR 1007-3, Part 261 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

The Colorado Hazardous Waste Regulations, 6 CCR 1007-3, Part 261, Subpart B, allow chemicals or other materials that are solid wastes to be added to the hazardous waste listings if the chemical can be shown to meet any one of the criteria listed in § 261.11. The Commission believes that, once the Mustard Agent meets the regulatory definition of "discarded" found in § 261.2(a)(2), and "discarded commercial chemical product, off-specification species, container residue, or spill residue" found in § 261.33, it also meets several of the listing criteria and, for the reasons presented herein, should be added as a P-listed hazardous waste.

This regulation adds waste (discarded) Mustard Agent to the P-listings found in § 261.33 of the regulations as an acutely toxic discarded chemical product. The regulatory criteria for listing a hazardous waste can be found in 6 CCR 1007-3, § 261.11. In summary, a solid waste can be listed as a hazardous waste if it meets any one of three (3) criteria: first, if it exhibits any characteristic of a hazardous waste; second, if it presents or is suspected to present certain acute human health hazards; and last, if it is capable of posing a substantial present or potential hazard to human health or the environment when improperly managed. Only the second criterion applies to acutely toxic materials, as the Division has proposed Mustard Agent to be.

Currently, the only facility in Colorado known to have material affected by this proposed hazardous waste listing is the Pueblo Chemical Depot (PCD), owned and operated by the United States Army (the Army). PCD has an inventory of 780,078 munition rounds containing 2611.05 tons of Mustard Agent. This represents almost 10% of the nation's chemical weapons stockpile. The inventory is in the form of 105mm and 155mm projectiles, and 4.2 inch mortar rounds.

By public law, Congress has directed the Army to destroy the entire PCD inventory of stockpile Mustard Agent. However, the Army has stated they have a continuing mission to maintain the Mustard Agent munition stockpile in a viable form. Nevertheless, because of chemical weapon treaty requirements and Congressional mandate, the Army has been pursuing chemical weapon destruction, including destruction of Mustard Agent. At PCD, Mustard Agent destruction will involve the treatment of the Mustard Agent by incineration or an alternative technology.

The P-listing proposed herein would apply to Mustard Agent that has been declared surplus or waste as a discarded chemical product, Mustard Agent that has been declared to be off-specification, and Mustard Agent spill residues and container residues, all of which are solid wastes.

Overview of 2,2-di(chloro-ethyl)sulfide ("Mustard Agent")

The term "mustard" can refer to several chemicals, but most commonly it refers to 2,2-di(chloro-ethyl) sulfide, or sulfur mustard. Mustard Agent is a synthetic organic compound that was first manufactured in 1822. The compound is stored as liquid and has a low vapor pressure at ordinary atmospheric temperature and pressures. As such, it evaporates into a gas very slowly under normal conditions. It was manufactured to be used in chemical warfare and was used as early as World War I and as recently as 1984-1988 during the Iran-Iraq war. During wartime, a Mustard warhead explodes on impact, vaporizing and spreading the contained agent in an area of enemy troops. As explained later, its effects during wartime are designed to be debilitating, if not fatal, via inhalation and dermal contact.

Mustard Agent is not used in the United States, except in laboratory settings. It does not occur naturally, and therefore, there are no natural background levels in the soil, air, water, or food. The known stockpile of Mustard Agent in the United States is under the control of the U.S. Army. While accidental releases of Mustard Agent and Mustard Agent wastes that are managed at Army facilities could adversely impact public health, workers at these facilities are more likely to be exposed than the general population.

If it is accidentally released, Mustard Agent in soil and under water may persist for up to 30 years. There is very little information on the transformation and degradation of Mustard Agent in the soil. Meteorological conditions such as temperature, humidity, and wind greatly affect persistence; with warmer temperatures and stronger winds, persistence decreases. The long residence time of Mustard Agent in soil and under water is thought to be due to the formation of a sulfonium-salt layer or a polymerized mustard-type compound that may insulate the agent.

Mustard Agent is very insoluble in water, but once dissolved, it rapidly hydrolyzes to thiodiglycol. Hydrolysis is primarily through reaction with surface water bodies rather than moisture in air. The half-life of Mustard Agent in a dissolved state is estimated to be 55 minutes at 10° C and 4 minutes at 25° C. Certain degradation products of Mustard Agent formed in the environment are toxic. Some of the degradation products include hydrochloric acid, ethylene, ethylene dichloride, 2,2-dichlorodiethyl disulfide, vinyl chloride, hydrogen sulfide, and oxathione.

Health Effects of Mustard Agent

Mustard Agent is a highly toxic compound and vesicant (blistering agent). It is known to be lethal from primary and secondary effects. However, the existing data on health effects for inhalation, oral, and dermal exposure of humans and animals to Mustard Agent are limited. Sufficient information is available from human exposure data to identify the skin and respiratory passages as target organs to acute, subchronic, and chronic exposures to this chemical warfare agent.

Inhalation: The estimated lethal concentration for Mustard Agent in humans via inhalation exposure is 50 mg/m3 for 30 minutes. If inhaled even at lower concentrations, its effects cause bronchitis, and blistering in the lungs. Long-term respiratory disease may result from even low-dose exposures. Repeated exposure can result in hypersensitivity to its effects.

Dermal Contact: Mustard Agent burns skin and causes blisters within a short time of exposure. Parts of the body that are moist are more likely to be harmed and it can easily pass through normal clothing to get on the skin. Agent exposure causes eye burning and eyelid swelling. The subcutaneous LD50 in rat is 2 mg/kg. The LD50 for Mustard Agent applied to rat skin was reported as 9-12 mg/kg. The dermal LD50 for Mustard Agent on rabbit skin was 40-100 mg/kg.

General: Ingestion of Mustard Agent results in necrosis and epigastric distress. Systemic absorption results in injury to the bone marrow, lymph nodes, and spleen producing leukopenia and thrombocytopenia. Mustard Agent is able to alkylate DNA, RNA, and proteins, and as a result, it can affect a variety of cell functions. This includes causing cell death by inhibition of DNA repair and replication, altering proteins that have been coded by alkylated RNA, structurally altering cell membranes, or otherwise altering cell proteins.

A mutagen and a carcinogen, Mustard Agent penetrates deep within tissue, resulting in destruction and damage at some depth from the point of contact. The actions of Mustard Agent resemble those produced by ionizing radiation and, therefore, Mustard Agents are often referred to as radiomimetic compounds. Penetration is rapid, so that efforts to remove the toxic agent from the exposed area are ineffective after 30 minutes. Only very limited data are available to assess the toxicokinetic properties of Mustard Agent. Mustard Agent changes into other chemicals (e.g., thiodiglycol and conjugates, sulfone products, and glutathione conjugates) in the body and these chemicals are excreted in the urine within a few weeks. Though a demonstrated teratogen in animals, it is not known whether Mustard Agent can cause birth defects or affect reproduction in humans. The estimated bioconcentration factor ranges from 7-15.

Regulatory Evaluation

The regulatory criteria for listing a solid waste as a hazardous waste can be found in 6 CCR 1007-3, § 261.11. As explained previously, this proposed listing applies to Mustard Agent that has been declared by the Army to be waste or surplus and removed from the chemical weapon stockpile to be destroyed. Therefore, it applies to Mustard Agent that is a solid waste.

The first criterion to list a solid waste as a hazardous waste in § 261.11(a) is that the solid waste exhibits any of the characteristics of a hazardous waste identified in Subpart C (§ 261.11(a)(1)). These characteristics are ignitability, reactivity, toxicity, and corrosivity. Of these, EPA has determined that Mustard Agent is reactive. The reason for this is Mustard Agent's ability, under certain circumstances, to rapidly react with water to form hydrogen sulfide, a highly toxic gas, as well as other toxic compounds such as hydrochloric acid. In addition, even though as manufactured Mustard Agents did not contain any toxicity characteristic (TC) constituents, the Army has chosen to apply TC waste codes D004 through D011 because these metals may have leached from the special alloys used in the munition casings.

The second criterion to list a solid waste as a hazardous waste in § 261.11(a) is that the waste has been found to be fatal in humans in low doses, or in the absence of data on human toxicity, it has been shown in studies to have certain specific animal toxicities (§ 261.11(a)(2)). There are enough human toxicological data and other information to meet the criteria of “fatal to humans in low doses.” In addition, one of the specific animal toxicities presented in § 261.11(a)(2) is a dermal LD50 toxicity (rabbit) of less than 200 mg/kg. Mustard Agent meets this criterion with a dermal LD50 for rabbits of 40-100 mg/kg. Pursuant to the preamble to this regulation found in the May 19, 1980 Federal Register (45 FR 33083-33119), materials that meet this criterion are acutely hazardous wastes, and included in § 261.33(e) as P-listed wastes. Therefore, this is the criterion Mustard Agent must meet to be listed as an acutely hazardous waste, or a P waste.

The third and last regulatory criterion in § 261.11(a) is that the solid waste contains any Appendix VIII constituents and that the Director concludes that the waste is capable of posing a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of, or otherwise managed (§ 261.11(a)(3)). Pursuant to the preamble to this regulation found in the May 19, 1980 Federal Register (45 FR 33083-33119), materials that meet this criterion are toxic wastes, and are included in § 261.33(f) as U-listed wastes. A U-listing is not part of this regulation, therefore, this criterion does not apply.

Based on the above regulatory evaluation, waste Mustard Agent meets the necessary criteria presented in § 261.11(a) of the regulations for listing as an acute hazardous waste. Therefore the Commission is adding waste Mustard Agent to the P-listed wastes found in § 261.33 of the regulations by adding wastes codes P909 and P910 for the H and HD forms of Mustard Agent (CAS #505-60-2) and the HT form of Mustard Agent (CAS #505-60-2 and #63918-89-8), respectively.

At a later time, when a specific treatment has been determined for destruction of waste Mustard Agent, the Commission understands that the Division will propose appropriate K-listings, as well as other appropriate listings, for specific waste treatment residues of Mustard Agent under § 261.32 of the regulations.

4.4 Benefits of Listing Mustard Agent as a Hazardous Waste

The principal benefits of listing waste Mustard Agent are:

1) Increased regulatory definition for management of waste Mustard Agent and agent treatment residues. Mustard Agent is a hazardous waste only because it is characteristic for reactivity and may be characteristic for metals toxicity. To treat a characteristic waste, it is only necessary to remove the characteristic. By listing Mustard Agent specifically, it requires more complete and appropriate treatment to remove the listing. The Commission believes this to be appropriate given Mustard Agent's extremely toxic health effects. The State gains additional accountability from the Army's ensuring protection of human health and the environment during interim management of waste Mustard Agent (the time between the agent being discarded and agent treatment), during treatment and destruction of Mustard Agent, and during disposition and management of treatment residuals.

2) Increased regulatory guidelines/enforcement for the treatment and management of associated wastes streams - munition parts, PPE, dunnage, etc. It is very unlikely that these materials would be reactive hazardous wastes. However, if agent wastes were listed, they would carry the listing until they were either delisted or fully treated or decontaminated. These materials make up important associated waste streams in the demilitarization process and could have, if improperly managed, significant impact on human health and the environment.

3) Any delisting that may be proposed by the Army for residual waste streams would have to be approved by the Commission.

4) Currently at PCD, it becomes difficult to discern when Agent-contaminated materials are hazardous waste (such as wooden pallets, laboratory wastes, PPE, etc). This is true both for Army and Division personnel. By assuming these materials are characteristic hazardous wastes, the Army has improved management of these materials at PCD. However, they are not necessarily required to manage them as hazardous wastes since many of these materials may not be characteristic wastes. Listing Mustard Agent clarifies when hazardous waste regulations apply and requires adequate record keeping and management of current and future inventories of waste Mustard Agent and other materials contaminated with Mustard Agent.

5) Under the P-listing, any spills (to soil or otherwise) would require cleanup and disposition as a listed hazardous waste, even though the soil may not be characteristic for reactivity.

6) With the recent Congressional mandate to the Army to study alternative technologies, and with Pueblo being a possible candidate for implementation of an alternate technology, listing Mustard Agent forces the Army to consider the listing in their alternative technology selection criteria. Because of this listing, secondary process wastes may be listed hazardous wastes and, therefore, the Army must plan waste management into their treatment selection to ensure proper waste management, and perhaps to minimize waste generation.

The anticipated costs to the Army related to the impact of this listing are minimal when compared to the overall cost of treatment and destruction of the agent. Many of these costs are already factored into the cost of the project.

Summary of Other State's Listings for Mustard Agent

There are seven states, plus Johnston Island, where Mustard Agents are currently stored as part of the chemical weapons stockpile. Five of these states have listed Mustard Agent as a hazardous waste. Each listing is slightly different, as described below:

Oregon	Listed HD and HT as P998 (blister agents). Principal justification was “to ensure adequate regulatory control over Mustard Agents that are destined for disposal and to deal with spill response and cleanups.” Listed HD and HT as F998 (blister agents). Principal justification was “to address the residues from treating, testing, and demilitarization of blister agents.”
Utah	Originally listed as P999 and F999. Utah has been reworking their listing for over a year. Anticipated changes include removal of the F999 listing and addition of several K-listings.
Indiana	Listed in Indiana Hazardous Waste Management rules as I001. Listing includes H, HD, and HT.
Kentucky	Listed in Kentucky Hazardous Waste Management Rules as N003. Listing includes H and related compounds.
Maryland	Listed in Code of Maryland Regulations as K997 - Waste HD and K998 - Waste T.

These states, except Indiana, have significant inventories of Mustard Agent. Utah already has the Tooele incinerator (TOCDF) up and operating; Oregon has recently issued a hazardous waste permit for a similar incinerator to be built at the Umatilla Chemical Depot.

Statement of Basis and Purpose - Rule-making Hearing of September 16, 1997

8.31 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 6 is made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-314(1), C.R.S.

Amendment of § 6.04

Section 6.04 is being amended by revising paragraph (a) to reflect the annual Commission fees to be assessed for fiscal year 1997-98.

Statement of Basis and Purpose - Rule-making Hearing of October 21, 1997

8.32 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 263 and 268 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

Part 263 Standards Applicable to Transporters of Hazardous Waste

These amendments to Part 263 of the Colorado Hazardous Waste Regulations, 6 CCR 1007-3, are adopted by the Hazardous Waste Commission pursuant to section 25-15-302 of the Colorado Hazardous Waste Act.

These amendments include recommendations made by the Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division and the Part 263 Critical Review Team. As part of a department-wide initiative, Critical Review Teams ("CRTs") were formed to review all existing regulations for the purpose of determining whether the regulations are necessary or if the same goals could be accomplished in a non-regulatory manner. All CRTs, including the Part 263 CRT, consist of representatives from the affected Division, the regulated community and the public.

The Part 263 CRT's review focused on the effectiveness of the existing requirements for persons owning or operating transfer facilities as part of the transportation of hazardous waste in Colorado, including the repackaging and consolidation of shipments of manifested hazardous waste at transfer facilities.

The major amendments being adopted at this time include:

1) Revising § 263.11 to require a transporter to receive an EPA Identification number if they operate in Colorado and have a transfer facility.

2) Revising the transfer facility requirements of § 263.12 to require a transporter to include a listing of all their transfer facility locations and a general description of the activities at these transfer facilities as required under the notification requirements of Part 99 of the Colorado Hazardous Waste Regulations 6 CCR 1007-3. This requirement clarifies the existing requirement on notification for transporters.

3) Adding specific requirements for transporters of hazardous waste who mix hazardous wastes of different applicable Department of Transportation (DOT) shipping descriptions. (See § 263.12(c) through 263.12(e)(6)). These requirements are meant to clarify the currently existing requirements and are not substantively different from current federal and state requirements.

4) Adding § 263.40 containing specific notification and response requirements for spills, fires and explosions at transfer facilities. This requirement is more stringent than federal requirements.

These amendments to Part 263 clarify the existing requirements for transporters and for operations of transfer facilities. Through explicit incorporation of the applicable requirements of Part 262 into the Part 263 regulations, these amendments clarify the specific Part 262 requirements that apply to transporters of hazardous waste in Colorado. These clarifications of the requirements are intended to improve compliance with existing requirements and enhance protection of public health and the environment from any impacts from the handling of hazardous waste at transfer facilities.

The addition of provisions on response and reporting spills, fires, and explosions at transfer facilities are more stringent than federal requirements and are intended to improve the protection of public health and the environment related to impacts from operations at transfer facilities. Similar provisions are required for response to incidents that occur during active transportation but have not been previously included in the requirements for transfer facilities.

Emergency Revision of the Land Disposal Restrictions (LDR) Treatment Standards for Listed Hazardous Wastes From Carbamate Production

In an August 28, 1997 Federal Register (62 FR 45568-45573), the Environmental Protection Agency (EPA) issued a second emergency revision extending the time that the alternative carbamate treatment standards are in place by one additional year (until August 26, 1998). Because the first emergency extension was due to expire on August 26, 1997, the Commission reserved § 268.40(g) rather than adopt the provision of 40 CFR § 268.40(g) as published in the Federal Register on August 26, 1996 (61 FR 43924-43931). Since the analytical problems which necessitated the 1996 emergency rule remain, EPA is extending the alternative treatment standards for carbamate wastes for one additional year.

To maintain consistency with the federal requirements and to remedy the state requirements of § 268.40(g) from inadvertently become more stringent than the federal program, the Commission is at this time revising the state analog to 40 CFR § 268.40(g) to adopt the federal extension of the alternative treatment standard provision. The Commission is also revising footnote 6 to the Universal Treatment Standards Table at § 268.48 to suspend the inclusion of carbamate waste constituents until August 26, 1998.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 62 FR 45568-45573, August 28, 1997.

Statement of Basis and Purpose - Rule-making Hearing of January 20, 1998

8.33 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 261, 268, and 273 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

Conformance with the Carbamate Vacatur

In a June 17, 1997 Federal Register (62 FR 32974-32980), the Environmental Protection Agency (EPA) amended its regulations to conform with the federal appeals court ruling in Dithiocarbamate Task Force v. EPA, 98 F.3d 1394 (D.C.Cir. 1996), that invalidated in part, Agency regulations listing certain carbamate wastes as hazardous wastes under the Resource Conservation and Recovery Act (RCRA). These regulations pertain to hazardous waste management of carbamate industry wastes under RCRA, related rules affecting the list of hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and regulations issued under state programs approved by the Administrator. Under the court's decision, and as reflected in the June 17, 1997 rule, the vacated federal hazardous waste listings and regulatory requirements based on those listings are to be treated as though they have never been in effect. State regulations, which may be more stringent than federal rules, were not necessarily affected by the court's ruling.

While the state has the authority to be more stringent than the federal program, this was not the intent of the Commission when originally promulgating state analogs to the federal regulations for carbamate wastes. At this time, the Commission is adopting revisions to the state analogs to maintain consistency and provide equivalency with the amendments of the June 17, 1997 rule (62 FR 32974-32980).

The amendments being adopted at this time include the following revisions:

1) Amending the table at § 261.32 to remove the entry for K160, and revising the listings for K156, K157, and K158 to reflect the fact that they do not apply to wastes from the production of 3-iodo-2-propynyl n-butylcarbamate (IPBC).

2) Amending the table at § 261.33(f) to remove the following twenty four U wastes that were vacated: U277, U365, U366, U375, U376, U377, U378, U379, U381, U382, U383, U384, U385, U386, U390, U391, U392, U393, U396, U400, U401, U402, U403, and U407.

3) Amending Appendix VII to Part 261 by removing the entire entry for EPA hazardous waste number K160.

4) Amending Appendix VIII to Part 261 by correcting typographical errors in the listings for Potassium n-hydroxymethyl-n-methyl-dithiocarbamate and Tetramethylthiuram monosulfide; and by removing the associated hazardous waste codes for the carbamate wastes that were vacated.

5) Amending the land disposal restriction (LDR) regulations of § 268.39(a) and (d) to remove the U and K wastes vacated by the court.

6) Amending the listings for K156, K157, and K158 in the table at § 268.40 to reflect the fact that they do not apply to wastes from the production of 3-iodo-2-propynyl n-butylcarbamate (IPBC).

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 62 FR 32974-32980, June 17, 1997.

Amendment of § 261.21

Paragraph (a)(4) of § 261.21 is being amended at this time by replacing the reference to "49 CFR § 173.151" with the proper reference citation of "49 CFR 173.127" as the correct location for the definition of "oxidizer".

Amendment of § 261.23

Paragraph (a)(8) of § 261.23 is being amended at this time by replacing the current references for the U.S. Department of Transportation (DOT) definitions and classifications of forbidden and Class A and B explosives with the proper reference citation of "49 CFR 173.50" to reflect the location of the new DOT classification codes for Class 1, Division 1.1, 1.2, and 1.3 explosives; and by referencing "49 CFR 173.54" as the correct location for the definition of "forbidden explosive".

Amendment of the U021 and U240 Listings in the table at § 268.40

These amendments revise the listings for U021 and U240 in the table at § 268.40 by changing the treatment standard of "INCIN", which specifies hazardous waste incineration, to "CMBST", which allows combustion in incinerators, boilers, and industrial furnaces. The new CMBST standard was inadvertently omitted from the U021 and U240 listings when the Hazardous Waste Commission adopted state analogs to EPA's Land Disposal Restrictions (LDR) Phase III rule at their August 19, 1997 hearing. These amendments provide state equivalency with the federal LDR Phase III requirements which were published in the Federal Register on April 8, 1996 (61 FR 15566-15660).

Amendment of § 273.14 and § 273.34

These amendments to paragraphs (b) and (c) of § § 273.14 and 273.34 correct inaccurate references for universal waste pesticides that exist in the current regulations. Paragraphs (b) of § § 273.14 and 273.34 are being revised at this time to replace "§ 273.3(a)(1)" with "§ 273.2(b)(1)(i)" as the correct citation for the location of the description of recalled universal waste pesticides. Paragraphs (c) of § § 273.14 and 273.34 are being revised at this time to replace "§ 273.3(a)(2)" with "§ 273.2(b)(l)(ii)" as the correct citation for the location of the description of unused universal waste pesticides.

Correction of Typographical Errors and Inadvertent Omissions

These amendments update the table of contents for Part 268 by adding a listing for Appendix XI; and revise line (c) of the § 273.6 definition of "Universal Waste" by adding a semicolon at the end of the sentence.

Statement of Basis and Purpose - Rule-making Hearing of May 19, 1998

8.34 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 262, 264, 265, 267 and 100 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

Military Munitions Rule

Under RCRA section 3009, States are barred from implementing requirements that are less stringent than the Federal program. Under RCRA, authorized states are required to review and, if necessary, to modify their programs when EPA promulgates Federal standards that are more stringent or broader in scope than existing Federal standards.

With today's amendments, Colorado is revising its state hazardous waste regulations to adopt equivalent state analogs to the federal provisions in EPA's February 12, 1997 Military Munitions final rule (62 FR 6622) that EPA considered to be more stringent than the current requirements. These more stringent provisions include:

1) The requirement that military installations retrieve munitions fired off-range or keep a record of the event (§ 267.202(d)); and

2) The requirements that military personnel responding to immediate threats involving military munitions maintain records of the response (§ § 264.1(g)(8)(iv), 265.1(c)(11)(iv), and § 100.10(a)(8)(Federal citation §270.1 (c)(3)(iii))).

Additional amendments being made at this time include adding definitions for "explosives or munitions emergency response specialist" and "military munitions" into § 260.10, and adding definitions for "military" and "military range" into a new Subpart M - Military Munitions in Part 267.

The Division is evaluating additional revisions to the Military Munitions regulations as it completes its review of the DOD Explosive Safety Board standards which have recently been revised.

This Basis and Purpose only incorporates by reference the preamble language for the definitions and more stringent EPA regulations as published in the Federal Register on February 12, 1997 (62 FR 6622-6657) for which state analogs are being adopted at this time.

§ 262.20(f) Manifest Exemption for Transport of Hazardous Waste on Right-of-Ways on Contiguous Properties.

Colorado is amending the Part 262 hazardous waste generator standards to add a manifest exemption for transport of hazardous wastes on right-of-ways on contiguous properties. Section 262.20(f) exempts all generators and transporters of hazardous waste, not just the military, from the RCRA manifest requirements for the transportation of hazardous waste on public or private right-of-ways on (or bordering) contiguous properties under the control of the same person, regardless of whether the contiguous properties are divided by right-of-ways. This revision is less stringent than the current manifest requirements, and Colorado is not required to adopt this less stringent provision as part of its State program. This revision is expected to reduce the paperwork burden for hazardous waste generators whose property is divided by right-of-ways without loss in protection of human health.

Additionally, under § 263.10(a), use of a transporter with a Hazardous Waste Identification number is not required for the movement of hazardous waste because of this manifest exemption. The Department recognizes that generators and TSDFs taking advantage of this exemption must be able to respond to an emergency should one occur during the movement of hazardous waste on public roads within, between, or bordering contiguous properties. As a result, under § 262.20(f), the Department is specifying that the transporter requirements found at § 263.30 and § 263.31 concerning responding to discharges of hazardous waste on a public right-of-way will continue to apply to any discharge of hazardous waste on a public right-of-way.

This Basis and Purpose incorporates by reference the preamble language for the federal § 262.20(f) manifest exemption regulations as published in the Federal Register on February 12, 1997 (62 FR 6622-6657) for which a state analog is being adopted at this time.

Statement of Basis and Purpose - Rule-making Hearing of June 9, 1998

8.35 Basis and Purpose

These amendments to 6 CCR 1007-3, Parts 260, 264, and 265 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-302(2), C.R.S.

Testing and Monitoring Activities Amendment III

These amendments incorporate Update III to the Third Edition of the EPA-approved test methods manual "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846 in § 260.11(a) for use in complying with the requirements of subtitle C of RCRA as outlined in 62 FR 32452-32463, June 13, 1997. The intent of this action is to provide state-of-the-art analytical technologies for RCRA-related testing, thus promoting cost effectiveness and flexibility in choosing analytical test methods, as well as clarifying the RCRA Program's approach to working toward the Performance Based Measurement System (PBMS).

The use of SW-846 in complying with the requirements of RCRA is limited to specific areas of RCRA. These areas were cited in the Hazardous Waste Commission's Statement of Basis and Purpose from the Rulemaking Hearing on November 19, 1996 for the adoption of 6 CCR 1007-3, Section 260.12, and, more recently, in the issuance of Joint Guidance from the NRC and EPA regarding testing requirements for Mixed Radioactive and Hazardous Waste (see 62 FR 62093, November 20, 1997). Generally, those areas requiring the use of SW-846 are limited to delisting petitions, waste testing for the corrosivity and toxicity characteristics, evaluating decontamination rinsates, free liquid determinations, organic process vent emissions testing, metallic emissions of BIFs, certain Land Disposal Restriction testing, and testing associated with incinerator unit trial burn demonstrations. A closer examination of the changes to SW-846 with respect to these areas which require "currently approved SW-846 methods" reveals the following:

1. There are no changes to the determination of the corrosivity characteristic. The appropriate methods remain SW-846 method 9040B (pH electrometric) and method 1110 (Corrosivity towards Steel). The "B" suffix designation of method 9040 indicates that this method has been revised twice: once in Update II, and again in Update IIB. These revisions were clarifying revisions incorporating narrative language necessary to assure proper operation of the method, to account for the variety of pH instruments commercially available, and included no substantive changes to the method.

2. There are no changes to the determination of free liquids. The appropriate method remains SW-846 method 9095A. The "A" suffix designation of method 9095 indicates that this method has been revised once in Revision 1. This revision was a clarifying revision incorporating narrative language necessary to assure proper operation of the method, and included no substantive changes to the method.

3. There are no changes to SW-846 method 1311 the Toxicity Characteristic Leaching Procedure ("TCLP") which is a preparatory method. However, there are changes to the determinative methods which would be used on extracts developed with the TCLP.

   3.a. TCLP metals analysis may be accomplished by acid digestion and Atomic Absorption Flame and Furnace methods for the RCRA metals. Neither the digestive procedures, nor the AA methods are modified by this rule. The last modifications to the digestive procedures, methods 3005A, 3010A, 3015,3020A, 3031, 3040A, and 3051A, occurred in Revision 2 (12/96). These changes were not substantive, but informational. However, in the proposed rule of 63 FR 25436, May 8, 1998, the EPA proposes to collapse each individual AA method (except Mercury method 7471B) with its own peculiar method number into a single integrated AA method, 7000B. The Department feels that the present numbering system for these methods is onerous, and the Department would wholeheartedly support legitimate efforts to simplify implementation because such actions are beneficial.

   3.b. TCLP metals analysis may also be accomplished by acid digestion and Inductively Coupled Argon Plasma Emission Spectrometry ("ICP" or "ICAP"). As stated previously, the digestive methods have not been changed since Revision 2, but this rule (62 FR 32452-32463 June 13, 1997) does change method 6010A to 6010B which broadly incorporates requirements necessary for the operation of the two types of geometry available in commercial instruments (radial and axial) as well as fully accommodating the optical detection configurations commercially available (sequential and simultaneous). Method 6010B incorporates informational changes that provide necessary information regarding dealing with chemical and physical interferences, background correction, and spectral overlap. The only substantive changes to the ICP methodology with an effect on Toxicity Characteristic determinations is the requirement for the laboratory to verify and update spectral correction factors, or multi-variate correction matrices every six months, or when maintenance is performed on the torch, nebulizer, injector, or when plasma conditions change. Another change with no effect on the Toxicity Characteristic determination is the incorporation of an internal standard for raw groundwater analyzed without a digestive procedure. The Department considers both of these changes necessary, and consistent with Good Laboratory Practices.

   3.c. TCLP volatile analysis may occur using only the methods 8021B, or 8260B. This rule (62 FR 32452-32463 June 13, 1997) discusses the collapse of methods 8010 (halogenated volatiles by gas chromatography-Electrolytic Conductivity Detector ("ELCD")), and 8020 (aromatic volatiles by gas chromatography-Photoionization Detector ("PID")) into one method 8021B using both detectors in series with a wide bore capillary column (0.53 or 0.75 mm ID X 60 meter). The elimination of packed column chromatography for the determination of TCLP extracts is thought, by the Department to be inappropriate. Furthermore, using these detectors in series offers no particular advantage to either the laboratory, industry, or the Department. Several laboratories operate parallel systems using a single injector with two columns each introducing eluate to a pair of ELCDs for instantaneous confirmation, or a ELCD-PID pair which affords instantaneous confirmation of those compounds containing chlorine, and a point of unstaturation (double bond). The 8021B method does state that systems operated with a single detector, either an ELCD or a PID, may be employed (method 8021B, paragraph 2.1), but this implies that a laboratory must have a second system, or a GC/MS system to confirm the presence of the detected analyte. The 8260B method is revised by this rule, but the method itself does not substantially change. Principle modifications to the 8260B method include language discussing the use of Selected Ion Monitoring ("SIM") for low concentration applications, or when interferants are present, and an expanded narrative containing guidance on method operation, quality control, and interface methods.

Volatile interface methods are modified by this rule, but these modifications do not substantially modify approaches to the TCLP. The Department has concerns about the cost, applicability, and safety regarding these new interface methods, and their use in other RCRA sampling. The interface methods added by this modification include 5021 - Equilibrium Headspace for Soils, 5030B-Purge and Trap for Aqueous Samples, 5031 - Azeotropic Distillation for non-purgable water soluble compounds, 5032-Vacuum Distillation, and 5035-Closed System Purge and Trap for Soil and Waste. Methods 5012 and 5035 employ “closed systems” and the use of acids which are not intrinsically safe to sampling crews, or laboratory chemists. Method 5031 includes narrative language discussing the notion that oxygenated volatile compounds do not perform well in Purge and Trap when acid preservation is employed; a fact established by the Department with the collection of empirical data. Of all of these interface methods, only 5030B-Purge and Trap is applicable to TCLP leachates, and this method is, fundamentally, the same Purge and Trap procedure used presently in most laboratories.

3.d. TCLP organochlorine pesticide analysis may occur with the use of method 8081A which is modified by this rule (62 FR 32452-32463 June 13, 1997) to set apart the organochlorine pesticides from PCBs and their congeners. The substantial modifications of this method are intended to promote the ease of qualitative and quantitative determinations for organochlorine pesticides by the use of preparation techniques and operating conditions that are exclusionary to PCBs. The elimination of packed column chromatography for the determination of TCLP extracts is thought, by the Department to be inappropriate. Examination of method 8082, though not specifically for TCLP target analytes, represents a significant improvement to the identification and quantitative determination of either the Arochlor, or its congeners by explicit qualitative/quantitative definition, preparation techniques, and operating conditions. Since method 8082 is not specifically required for regulatory compliance, the previous method 8080A may be employed.

3.e. TCLP organophenol analysis may occur with the use of method 8041 which was modified by Revision 0 in December of 1996, or 8270C modified by this rule. Modifications to method 8270C are informational to include language discussing the use of Selected Ion Monitoring (“SIM”) for low concentration applications, or when interferants are present, and an expanded narrative containing guidance on sample preparation, method operation, and quality control.

3.f. TCLP for the chlorinated phenoxyacid herbicides occurs by method 8151A modified by this rule. The principal modification involves the expansion of derivatization methodology to include methylation and pentafluorobenzylation. The allowable derivatization agents in 8151A are pentafluorobenzyl bromide and diazomethane. The Department supports the inclusion of pentafluorobenzylation as an alternative for industry and laboratories which is appropriate for the determination of extremely low concentrations of the target analytes, but such an approach is not necessary to determine the concentrations of 2,4-Dichlorophenoxy acetic acid (“2,4-D”) and Silvex (“2,4,5-TP”) at or above the concentrations of concern for these analytes for TCLP (10 ppm for 2,4-D and 1 ppm for 2,4,5-TP). The Department is more concerned about the use of diazomethane which is a toxic, carcinogenic, explosive gas for these determinations. The Department feels that EPA's failure to allow the use of equivalent (and safer) approaches such as the use of the Lewis acid, Boron Trifluoride/Methanol, or Trimethylsilyldiazomethane as methylation derivatization reagents have not kept up with current knowledge of synthetic chemistry.

4. The federal government considers SW-846 methods to be used as trace analytical methods to demonstrate that a waste does not contain constituents that require management as a hazardous waste (see 62 FR 32457). Therefore, delisting petitions offered to reflect the requirements 6 CCR 1007-3, Section 260.22, must utilize "current approved SW-846 methods". This section describes the steps necessary to remove a site specific waste from the hazardous wastes lists. To date, the Department has worked with only two delisting petitions, and experience has shown that it is beneficial for any regulated industry contemplating delisting wastes to participate in substantative discussions with the Department regarding the particular selection of sampling and analytical methods for this purpose. The discussions presented here are intended to provide material guidance in these method selections, but to conserve costs and accurately represent the nature of wastes proposed for delisting, interaction between the Department and industry is highly recommended. This discussion is relevant to determinations made on equipment rinsates as well.

5. The only change to organic process vent emission testing required by this rule (62 FR 32452-32463 June 13, 1997) involves the use of method 8260B. The use of method 9060 is also required, but this rule does not alter the Total Organic Carbon method which was last modified in Revision 0 of September 1986. See the discussion on TCLP organic determinations.

6. The changes in requirements for BIFs by this rule (62 FR 32452-32463 June 13, 1997) are the required use of methods 0060, and 0061 for Total Stack Emissions and Hexavalent Chromium Emissions. These changes to these two methods are informational, clarifying language necessary to assure proper operation of the methods.

7. There are no changes to Land Disposal Restriction testing requirements instituted by this rule (62 FR 32452-32463 June 13, 1997). The specifications for treatment standards for Methanol and Carbon Disulfide are determined by use of a TCLP extract (see discussion of TCLP), and total/amenable cyanides by method 9010B are specified by a 10 gram sample (minimum) and a 30 minute distillation time. These changes were incorporated by the LDR Phase I, and Phase IV rules.

8. Colorado does not have an interim status, or permitted incinerator unit. Therefore, these changes are irrelevant to this discussion.

   The federal regulatory impact analysis for this rule found that there was not a "significant regulatory impact" (see 62 FR 32461) This rule is presented as a simple, clarifying rule which explains the requirements and inherent flexibility in RCRA Testing and Monitoring. This analysis may not be entirely correct because certain applications are being phased out (specifically packed column chromatographic methodology), and newer methodologies employing capillary columns are being required. The Department does not think that this impact is unworkable, but questions whether deleting applicable, serviceable, and usable methods is the prudent thing to do. The Department does not think that this modification of SW-846 will bring new wastes into the hazardous waste universe because there are no changes to "method defined parameters" where the analytical result is wholly dependent on the process used to make the measurement. Changes to these parameters may change the end result, and alter the outcome of testing and analysis. The changes discussed in this rule (62 FR 32452-32463 June 13, 1997) are not of that nature. By and large, sampling precision is a much wider influence on the resulting data and is a larger contributor to the final result than the changes suggested in this rule.

   The Department has always recognized those areas of RCRA which require the use of SW-846, and has allowed alternative methods where SW-846 is not mandatory. This was formally described in the language incorporated into 6 CCR 1007-3, Section 260.12 (a) and (b) where the Department specified the information necessary to allow the use of other sampling and analytical methods.

The Department has always operated in the belief that equivalent data obtained at a cost savings was beneficial to the implementation of RCRA in Colorado. Areas of RCRA such as Corrective Action and Permitting allow for the use of alternate methodology, provided that such methodology meets the Data Quality Objectives (performance objectives), or the reasons for sampling. Determinations of whether, or not SW-846 methods are required in a given circumstance has been complicated by uninformed and misdirected assertions that RCRA broadly requires the use of "currently approved SW-846 methods."

In the June 13, 1997 final rule (62 FR 32452-32463), EPA announced its interpretation to achieve a Performance Based Measurement System by deleting certain applicable, serviceable, and usable methods, and then stating that these deleted methods may be used provided that the Data Quality Objectives for the project are met. The Department interprets that SW-846 is a compendium of methodologies similar to other repositories of analytical methodology such as the American Organization of Analytical Chemists ("AOAC") method references, and that federal deletion of these referenced methods from the SW-846 in no way invalidates data generated by employing these methods in the past, or in the future. Any method which meets the specifications found in 6 CCR 1007-3, Section 260.12 (a) and (b) may be used when SW-846 is not specifically required. These applications may be published methodology, ready for immediate application with known performance characteristics such as: AOAC, American Water Works Association Methodology, Drinking Water Methodology, Clean Water Act Methodology, Contract Laboratory Program methods ("CLP"), American Society of Testing and Materials ("ASTM"), SW-846 methods from a previous edition or update, or methods researched and developed for a particular application provided that the Data Quality Objectives for the project are met.

In the environmental field, there is not a dearth of individuals educated and experienced in sampling, analysis, and the nuances of RCRA. Frequently, laboratory chemists are asked to render opinions regarding the use of particular methodology without fully knowing RCRA implications, or industry officials are tasked with determinations of applicable methodology without full knowledge of sampling and analytical method strengths and weaknesses. In a simpler world, information of this nature could be found in tabular form and presented for consultation. With the dollars actually being spent in the real world, cost savings from appropriately directed and designed sampling that meets or exceeds the purpose of sampling ought to be fully explored. A tabular presentation of the current state of knowledge in sampling and analysis of hazardous wastes has not been compiled; furthermore, such a document would most likely be obsolete prior to widespread use. To assist in directing sampling and analysis, the Department has always focused on the capture of useful data with sensitivities to cost. There exists the possibility that certain entities will insist upon the application of the most current SW-846 publication for any particular analysis when it is only required in certain instances. Implementing a Performance Based Measurement System will involve effort. This effort must be made in government and industry.

Presently, the only course of action to request consideration for another method when SW-846 is required is found at 6 CCR 1007-3, Section 260.21 which authorizes the Colorado Hazardous Waste Commission to entertain petitions submitted to use alternative methodology. On a national level, changes to those few areas where SW-846 is a requirement are being discussed, and the EPA has published a Notice of Intent to Reform Implementation of RCRA-Related Methods and Monitoring (see 63 FR 25430-25438, May 8, 1998). The direction of this dialog is known, but the precise outcome is not. The Department will participate in the debate, and comment on proposed changes, but the Department preceded the EPA by defining and implementing a Performance Based Measurement System approximately 1 1/2 years prior to the time that EPA issued this rule and interpretation. The Department's Performance Based Measurement System is continuously evolving to incorporate the forefronts of scientific inquiry where it is necessary, while allowing inexpensive, innovative applications of chemical measurements when the Data Quality Objectives of the project are met.

The Commission is not adopting the revisions made to 40 CFR Part 266, Subpart H - "Hazardous Waste Burned in Boilers and Industrial Furnaces". Colorado has not adopted a state analog to 40 CFR Part 266, Subpart H at this time. There are currently no BIFs seeking a permit or operating in Colorado. Operation of these devices is regulated in Colorado by the U.S. Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 62 FR 32452-32463, June 13, 1997.

Statement of Basis and Purpose - Rule-making Hearing of July 21, 1998

8.36 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 6 and 100 are made pursuant to the authority granted to the Hazardous Waste Commission in section 25-15-314(1), C.R.S. and in section 25-15-302(2), C.R.S.

Amendment of § 6.04

Section 6.04 is being amended by revising paragraph (a) to reflect the annual Commission fees to be assessed for fiscal year 1998-99.

Amendment of § 100.506(a)(1)(vi)

Section 100.506 is being amended at this time by revising paragraphs (a)(1)(vi) through (a)(1)(vi)(B)(4) of § 100.506. These amendments were part of the Environmental Protection Agency's "RCRA Expanded Public Participation" final rule that was published in the Federal Register on December 11, 1995 (60 FR 63417-63434), but were inadvertently omitted from the revisions adopted by the Hazardous Waste Commission at their April 16, 1996 hearing. These amendments provide state equivalency with the regulatory requirements of 40 CFR § 270.62(b)(6).

Statement of Basis and Purpose - Rulemaking Hearing of September 15, 1998

8.37 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 261 Appendix IX are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of Part 261 Appendix IX to Conditionally Delist Reconstructed Cell Leachate Generated at the Denver Arapahoe Chemical Waste Processing Facility ("DACWPF")

The purpose of this amendment to Appendix IX of Part 261 of the Colorado Hazardous Waste Regulations is to grant the petitioner a conditional delisting of its leachate collected from the primary and secondary leachate collection sumps of a reconstructed waste disposal cell at the Denver Arapahoe Chemical Waste Processing Facility ("DACWPF") in Aurora, Colorado. Granting this petition will enable Waste Management of Colorado Inc. (WMC) to use the collected leachate for dust suppression at Subtitle D solid waste disposal facilities.

DELISTING PETITION REVIEW - EXECUTIVE SUMMARY

PETITIONER: Waste Management of Colorado Inc. (WMC)

SUBMITTAL DATE: June 17, 1998

DESCRIPTION OF WASTE: The waste stream identified in this petition is leachate collected from the primary and secondary sumps of a closed hazardous waste landfill. The landfill is the closed commercial hazardous waste landfill at the Denver Arapahoe Chemical Waste Processing Facility (DACWPF) located at 27500 East Yale Avenue, Aurora Colorado. The leachate generated by the landfill is classified as an F039 hazardous waste.

CONTENT OF THE PETITION: The Hazardous Materials and Waste Management Division has determined that WMC's June 16, 1998 Delisting Petition meets the requirements of 6 CCR 1007-3, Section 260.20, with some qualifications.

PURPOSE OF THE PETITION: WMC is asking for the conditional delisting of a waste stream generated at the closed DACWPF commercial hazardous waste landfill. The petition specifically requests the delisting of the leachate collected in the primary and secondary leachate collection sumps which is currently managed as an F039 hazardous waste. The delisting petition requests that the leachate be permitted to be used for dust suppression at Subtitle D solid waste disposal facilities. WMC believes that use of the leachate as a dust suppressant at Subtitle D solid waste disposal facilities is justified based upon their risk assessment which indicates that the leachate poses no hazards to human health or the environment if managed in this manner.

CONDITIONS OF THE DELISTING:

1) The collected leachate must be used only for dust suppression at Subtitle D solid waste disposal facilities;

2) Use of the collected leachate for dust suppression shall be limited to areas within the footprint of any Subtitle D solid waste disposal facility liner system and shall not be applied to the final cover of any subtitle D solid waste disposal facility;

3) The leachate must be sampled annually and analyzed for toxicity characteristic leaching procedure (“TCLP”) metals, volatiles, semi-volatiles, and pesticides to ensure that it will satisfy the conditions presented in the petition and does not exceed applicable risk levels; and

4) Appropriate precautions should be taken to avoid dermal contact or ingestion of the leachate such as, where appropriate, use of repellent boots, coveralls, gloves, and safety glasses.

Statement of Basis and Purpose - Rulemaking Hearing of April 20, 1999

8.38 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 261, 262, 264, 265, 268 and 100 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Organic Air Emission Standards for Tanks. Surface Impoundments, and Containers.

These amendments revise the final subparts AA, BB, CC rules in order to further clarify the regulatory text of the final standards, and to correct typographical and grammatical errors that exist in the current rules. These amendments correspond to and provide state equivalency with the EPA final rule federal regulations that were published in the Federal Register on December 8, 1997 (62 FR 64636-64671) and January 21, 1999 (64 FR 3382-3391).

The Environmental Protection Agency (EPA) originally promulgated RCRA standards designed to reduce organic air emission from hazardous waste management activities in 1994 (59 FR 69826, December 4, 1994). The organic air emission standards control air emissions from certain process vents and equipment leaks (Part 264 and Part 265, Subparts AA and BB), and emissions for certain tanks, containers, and surface impoundments (the Subpart CC standards). EPA has issued a number of effective date postponements and modifications to its original Subpart CC rulemaking of December 4, 1994. The adoption of these amendments to the state air emission standards are necessary to maintain equivalency to and consistency with the latest modifications to the federal RCRA organic air emission control standards.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 62 FR 64636-64671, December 8, 1997, and at 64 FR 3382-3391, January 21, 1999.

Organobromine Production Wastes.

This rule adds a listing for 2,4,6-tribomophenol as a hazardous constituent in Appendix VIII of Part 261; promulgates the listing of floor sweeping, off-specification product and spent filter media from the production of 2,4,6-tribomophenol as hazardous waste K140 in § 261.32; and lists the 2,4,6-tribomophenol commercial chemical product in § 261.33(f) as hazardous waste U408 when discarded. This rule also sets land disposal restrictions prohibitions and treatment standards for these wastes in Part 268 of the regulations. The effect of listing these wastes will be to subject them to stringent management and treatment standards under RCRA, as well as to emergency notification requirement for releases of hazardous substances to the environment (CERCLA and EPCRA).

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 63 FR 24596-24628, May 4, 1998 and at 63 FR 35147-35150, June 29, 1998.

Statement of Basis and Purpose - Rulemaking Hearing of April 20, 1999

8.38 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 100 are adopted pursuant to the authority granted to the Hazardous Waste Commission under § 25-15-302(2), C.R.S.

Amendments to Part 100 to create a streamlined permit authorizing corrective action or closure at non-permitted facilities

These amendments are being adopted as part of a streamlining initiative that the Department is developing. The amendments provide a simplified means for the Department to oversee corrective actions and closures at unpermitted facilities subject to the requirements of Part 264 or Part 265.

In recent years, there has been a significant increase in the number of facilities that have neither a permit nor interim status under Part 100, but that require corrective action or closure due to releases of hazardous waste into the environment. Technically, these facilities have illegally disposed of hazardous waste without a permit. Without the new mechanism proposed in this rule, the Department must either issue a unilateral order or negotiate a consent order to provide an enforceable mechanism for oversight of corrective action or closure at these unpermitted facilities. Either process can be very time-consuming, and both may carry a certain stigma because of the statutory requirement that orders cite alleged violations of the Colorado Hazardous Waste Act, and do so “with particularity.” Section 25-15-308(2)(a), C.R.S. The new mechanism avoids this stigma, and substantially reduces the transaction costs - for both the Department and the facility - of providing an enforceable oversight mechanism.

The rule provides the opportunity for a facility to conduct corrective action or closure under this mechanism for an entire facility or a portion thereof. The application allows for submittal of an integrated Corrective Action Plan similar to plans covered by the Voluntary Cleanup and Redevelopment Act or a Corrective Action Plan that includes phased investigation and cleanup activities.

In the event a facility disputes elements of the Department's decision on Corrective Action Plan under this mechanism, the rule expressly states that the decision may be appealed under section 25-15-305, C.R.S. Any subsequent determinations that the Department makes on the Corrective Action Plan may also be appealed under the same section.

The new rule also provides that corrective action conducted under this provision is subject to document review and activity fees under § 100.32. Currently, the Department does not recover costs for time spent reviewing documents, such as investigation plans, that may be submitted prior to a corrective action or closure order being in place. The Department frequently spends substantial time reviewing such documents prior to having an order in place. Because § 100.32(a)(1)(vii) authorizes the Department to obtain reimbursement for "reviewing, evaluating and responding to any and all documents submitted... in connection with… permit... corrective action," the new rule will enable the Department to recover its costs associated with any such documents, as well as other documents submitted in connection with corrective action under this new rule.

The rule also allows the Department to designate a corrective action management unit or temporary unit under this new provision, so long as it complies with the public notice requirements of § 100.21(e). The ability to designate a CAMU or TU in this mechanism provides expanded opportunities for streamlined cleanups.

The Department is committed to a comprehensive review of its approach to oversight of hazardous waste cleanups. The department expects to propose additional regulatory streamlining proposals. EPA recently promulgated a rule offering alternatives to the existing requirement for a post-closure permit for regulated units that close with waste in place, and another rule streamlining cleanup requirements for contaminated media. The Department is reviewing these rules and intends to propose similar streamlining efforts. Generally speaking, the amendments to Part 100 have been developed to complement these future changes, although some modifications may be necessary.

Statement of Basis and Purpose - Rulemaking Hearing of July 20, 1999

8.39 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 6 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-314(1), C.R.S. and in § 25-15-302(2), C.R.S.

Amendment of § 6.04

Section 6.04 is being amended by revising paragraph (a) to reflect the annual Commission fees to be assessed for fiscal year 1999-2000.

Statement of Basis and Purpose - Rulemaking Hearing of September 21, 1999

8.40 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 261, 262, 264, 265, 266, 268 and 100 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Standards Applicable to Owners and Operators of Closed and Closing Hazardous Waste Management Facilities: Post-Closure Permit Requirement and Closure Process

In an effort to remove impediments to cleanup at hazardous waste facilities, the Hazardous Waste Commission is promulgating revisions to the closure and post-closure care regulations to coordinate the implementation of RCRA closure, post-closure care, and corrective action requirements.

These amendments create an optional, new procedural mechanism for imposing requirements on units or facilities that closed without obtaining a permit. These amendments allow the Department to issue a post-closure permit to a facility or to impose the same regulatory requirements in an enforceable document issued under an alternate non-permit authority in lieu of a post-closure permit. Facilities that receive enforceable documents (as defined at § 100.10(d) of the regulations) in lieu of post-closure permits must meet the same substantive requirements that apply to units receiving post-closure permits.

As outlined in § 265.121 of the regulations, facilities that obtain enforceable documents in lieu of post-closure permits will have to: (1) submit information about the facility as detailed in §100.41(b)(14); (2) conduct facility-wide corrective action for solid waste management units (SWMUs) as required under § 264.101; and (3) comply with the Part 264 Groundwater monitoring requirements of § § 264.91 through 264.100. Facilities subject to the new § 265.121 requirements will also remain subject to all other applicable interim status requirements, including requirements for financial assurance.

These requirements assure that facilities addressed under alternate authorities are subject to the same level of environmental protection as facilities regulated under post-closure permits, while allowing the Department the flexibility to replace the closure and groundwater requirements at certain hazardous waste units with similar, site-specific requirements developed through the corrective action process.

This rule provides the Department with discretion to prescribe alternative groundwater monitoring, closure and post-closure, and financial responsibility standards at both operating and closed facilities, when the Department finds that a release of hazardous waste or hazardous constituents has occurred, and both a regulated unit and one or more SWMUs (or areas of concern) are likely to have contributed to the release. These provisions are promulgated in this rule in § § 264.90(f), 264.110(c), 265.90(f), 265.110(d), and 266.10(d) of the regulations.

This rule also adds public participation requirements for enforceable documents at § 265.121 of the regulations. These new public participation requirements require the Department to provide public notice and an opportunity to comment: (1) When the Department becomes involved in a remediation at the facility as a regulatory or enforcement matter; (2) on the proposed remedy and the assumptions upon which the remedy is based; and (3) prior to making the final decision that remedial action is complete at the facility.

The Commission believes that this rule will facilitate the implementation of RCRA post-closure care and corrective action requirements by expanding the regulatory options available to the Department to address environmental needs at facilities undergoing post-closure care. This rule will also allow the Department to address certain hazardous waste units under the corrective action process rather than closure, thus removing impediments to cleanup that have been encountered where two similarly situated units have been subject to two different regulatory requirements.

These amendments correspond to the EPA final rule federal regulations that were published in the Federal Register on October 22, 1998 (63 FR 56710-56735). Since none of the provisions addressed by this rule make the federal regulations more stringent, Colorado is not required to adopt state analogs to this rule.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 63 FR 56710-56735, October 22, 1998.

Land Disposal Restriction Phase IV - Treatment Standards for Metal Wastes and Mineral Processing Wastes

These amendments correspond to and provide state equivalency with specific portions of the applicable federal LDR Phase IV provisions that were published in the Federal Register on May 26, 1998 (63 FR 28556-28752). With the exception of the amendments that clarify certain portions of the land disposal restrictions and correct typographical errors, Colorado is only adopting state analogs to the portions of the federal rule that are not optional and that the state is required to adopt. Colorado is not adopting state analogs to the federal LDR Phase IV provisions concerning hazardous soils treatment standards and exclusions; mineral processing secondary materials exclusion; Bevill exclusion revisions; or the exclusion of recycled wood preserving wastewaters.

These amendments add waste specific prohibitions for toxicity characteristic metal wastes at § 268.34 of the regulations. These amendments also revise the tables at § § 268.40 and 268.48 by revising the Universal Treatment Standards (UTS) levels for ten (10) metal constituents in nonwastewater forms of hazardous wastes. The 10 metal constituents include antimony, barium, beryllium, cadmium, chromium, lead, nickel, selenium, silver, and thallium. These new treatment standards will replace the existing UTS values. These amendments also adjust the treatment standards for vanadium in P119 and P120 nonwastewaters, as well as zinc in K061 nonwastewaters.

These amendments also apply Universal Treatment Standards for the first time to 8 toxicity characteristic (TC) metal wastes: arsenic (D004), barium (D005), cadmium (D006), chromium (D007), lead (D008), mercury (D009), selenium (D010), and silver (D011). The UTS apply to both wastewater and nonwastewater forms of the wastes (except for TC arsenic wastes, for which the UTS apply to wastewater forms only), and to both organic and metal underlying hazardous constituents in them. The Universal Treatment Standards (UTS) are based upon the latest performance data from the Best Demonstrated Available Technologies (BDAT) for treating these, or similar, wastes. These treatment standards will apply to the entire universe of metal-bearing characteristic hazardous wastes, including those wastes that fail the toxicity characteristic for metals and all other characteristic wastes that have metals present as underlying hazardous constituents.

In addition, these amendments correct typographical errors in and make clarifying changes to certain portions of the Part 268 land disposal restrictions. These amendments include the improvements and corrections that are discussed in pages 28622 and 28623 of the May 26, 1998 LDR Phase IV rule, as well as additional corrections and clarifications that were part of subsequent final rules published in the Federal Register on September 4, 1998, September 24, 1998, and May 11, 1999.

These amendments and corrections of typographical errors include:

1) Revising paragraph (a)(2)(i) of § 261.3;

2) Correcting the cite reference in paragraph (d)(4) of § 262.34 from “268.7(a)(4)” to “268.7(a)(5)”;

3) Revising paragraphs (a)(2)(i) and (a)(2)(iii) of § 268.4 to delete the references to § 268.8;

4) Adding clarifying language to the tables at § 268.7(a) and (b);

5) Correcting the cite references in paragraphs (d)(2) and (d)(2)(i) of § 268.9 from “268.7(b)(5)” and “268.7(b)(5)(iv)' to “268.7(b)(4)” and “268.7(b)(4)(iv)”;

6) Removing the California List Requirements in § 268.42(a)(1) and (a)(2); and removing the de minimis provision of paragraph § 268.42(a)(3);

7) Revising paragraphs (3) and (4) of § 268.45(d) to remove the outdated cross references to the treatment standards that were once found at § 268.42 and § 268.43;

8) Correcting typographical errors in the table at § 268.40;

9) Revising the table in paragraph (a) of § 268.48 to delete the entries for A2213, Bendiocarb phenol, Diethylene glycol, dicarbamate, Dimetilan, Formparanate, Isolan, o-Phenylenediamine, and Tirpate;

10) Revising paragraph (e) of § 268.50 to delete the erroneous references to § § 268.41, 268.42, 268.43, and 268.32;

11) Amending Table 1 in Appendix VII to Part 268 by removing the entries for waste code F033; revising the second entry for waste codes F032 and F034; revising the first entry for waste code K088; revising the entries for D003-D011; and adding two entries for waste code F035;

12) Revising Table 2 in Appendix VII to Part 268 by revising entry number 9 and adding entries 12 and 13; and

13) Revising the title of Appendix VIII to Part 268 and adding in alpha numeric order the entry "NA".

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 63 FR 28556-28752, May 26, 1998; at 63 FR 47410-47418, September 4, 1998; at 63 FR 51254-51267, September 24, 1998; and at 64 FR 25408-25417, May 11, 1999.

Statement of Basis and Purpose - Rulemaking Hearing of October 19, 1999

8.41 Basis and Purpose.

These amendments to 6 CCR 1007-3. Parts 260, 261, 264, 265, 267, 268, 273 and 100 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Hazardous Waste Lamps

These amendments add regulations for the management of hazardous waste lamps, specifically mercury-containing lamps, under the Part 273 Universal Waste Management Standards. The universal waste management standards consist of streamlined regulations designed to address the management of certain widely generated hazardous wastes, known as "universal wastes".

The original federal Part 273 Universal Waste Regulations were published in a May 11, 1995 final rule (60 FR 25492-25551) and addressed the management of waste batteries, certain waste pesticides, and waste mercury-containing thermostats. The Colorado Hazardous Waste Commission adopted state analogs to these federal-requirements on October 17, 1995. On January 16, 1996, the Commission adopted state regulations adding standards for the collection and management of waste aerosol cans under the Part 273 universal waste regulations. On July 6, 1999, EPA issued a final rule adding hazardous waste lamps to the federal list of universal wastes regulated under the Resource Conservation and Recovery Act (RCRA). The present amendments expand the scope of Colorado's current Part 273 universal waste regulations by adding state management standards for hazardous waste lamps.

The existing federal regulations for managing hazardous waste lamps under the Part 273 universal waste standards are less stringent than the current state program, and Colorado is not required to adopt state analogs to these less stringent provisions. These amendments, in conformity with the existing federal Part 273 universal waste regulations allow for modified standards for storing, transporting, and collecting hazardous waste lamps.

Spent lamps are often hazardous because they exhibit the characteristic of toxicity by exceeding the regulatory level for mercury or another constituent (most frequently lead). Currently, if a mercury or lead-containing lamp is a hazardous waste, it must be managed under the full RCRA Subtitle C regulation. The Commission believes that regulating hazardous waste lamps under the universal waste program will lead to better management of these lamps and will facilitate compliance with hazardous waste requirements The streamlined requirements of the universal waste program should also encourage the establishment of and participation in environmentally-sound collection and recycling programs by generators and handlers of universal wastes. Increasing the availability of these collection and recycling programs will subsequently strengthen environmental protection by encouraging that these universal wastes are treated or recycled in facilities subject to the full hazardous waste regulations rather than illegally disposed of, as many currently are, in municipal solid waste landfills.

These amendments add subsections to § § 273.13 and 273.33 of the existing universal waste rule to specifically address the management requirements for handling hazardous waste lamps. New § 273.13(e) includes lamp handling requirements for small quantity handlers of universal lamps, and new § 273.33(e) provides lamp handling requirements for large quantity handlers of universal waste lamps. Both small and large quantity handlers must follow specific requirements when handling universal waste lamps, including specific packaging standards to prevent breakage of waste lamps during accumulation, storage, and transport. In addition, these amendments require that spent lamps be managed in a way that prevents releases of mercury or other hazardous constituents to the environment during accumulation, storage, and transport.

Specific universal waste lamp management standards that are being added at this time include: 1) requiring handlers of universal waste lamps to immediately clean up and place in a container any lamp that is broken, or that shows evidence of breakage, leakage, or damage that could cause the release of mercury or other hazardous constituents to the environment; 2) requiring that the containers or packages used to accumulate hazardous waste lamps are closed, structurally sound, adequate to prevent breakage, compatible with the contents of the lamps, and lack evidence of leakage, spillage or damage that could cause leakage or releases of mercury or other hazardous constituents to the environment; and 3) requiring that any universal, waste lamp, and/or any container in which universal waste lamp(s) are contained or accumulated, are properly labeled or marked to identify the type of universal waste being managed.

In adopting state universal waste standards for waste lamps, the Commission is also adding standards to allow generators of such lamps to crush them on-site before sending them off-site for treatment or disposal. The Department considers the physical activity of crushing lamps to meet the definition of “treatment” as defined in § 260.10 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3). The Department allows the treatment of hazardous waste in accumulation tanks or containers if the treatment meets the requirements of a permit-by-rule described in § 100.21(d) of the regulations, which establishes the conditions for such treatment. With the adoption of the universal waste management standards for hazardous waste lamps, universal waste handlers will be able to crush their waste lamps in accordance with the. requirements outlined in § § 273.13(e) and 273.33(e) of the Part 273 universal waste regulations. A hazardous waste determination must still be made on both the crushed material and filter prior to disposal or recycling. The federal universal waste rule contains the treatment prohibition for universal waste handlers, and prohibits universal waste handlers from crushing universal wastes lamps. The Commission believes that the crushing of lamps under specific controlled standards will ensure protection of human health and the environment, and provide equivalence with the federal regulations.

As part of the waste management standards of § § 273.13(e) and 273.33(e), handlers who crush waste lamps are required to ensure that the universal waste lamps are crushed in a completely enclosed system that is designed to prevent the release of any universal waste or component of universal waste to the environment (e.g., a sealed tank or container that is equipped with a filter to capture mercury emissions). The universal waste handler must also ensure that the crushing operations are performed safely by developing and implementing a written procedure detailing how to safely crush the universal waste lamps. This procedure must include: the type of equipment to be used to crush the universal waste lamps safely; operation and maintenance of the unit; segregation of incompatible wastes; proper waste management practices; and waste characterization.

Handlers of universal waste who crush waste lamps, or who generate other solid waste as a result of such activity are required to determine whether the residues and/or other solid waste are a listed hazardous waste, or if they exhibit a characteristic of hazardous waste. If the generated waste is a listed hazardous waste. or exhibits a characteristic of hazardous waste, it must be managed in compliance with all applicable requirements of Parts 260 through 268, and Parts 99 and 100 of the Colorado Hazardous Waste Regulations 6 CCR 1007-3. If the generated waste is not a listed hazardous waste, or does not exhibit a characteristic of hazardous waste, it is not subject to the hazardous waste requirements, nor is it subject to the requirements of Part 273. This waste is, however, required to be handled in compliance with applicable federal, state, or local solid waste regulations. The crushing of universal waste lamps may also require filing an Air Pollution Emission Notice (APEN), and the use of control devices to capture airborne contamination.

Labeling and Marking requirements for universal waste lamps are also being added at this time. Under § § 273.14 and 273.34, a universal waste handler managing waste lamps at his/her facility is required to label each individual lamp or container or package in which such lamps are contained or accumulated, with the words “Universal Waste - Lamp(s)”, or “Waste Lamp(s)”, or “Used Lamp(s).”

Under the notification requirements of § 273.32, large quantity handlers of universal waste lamps accumulating more than 5,000 kg of universal waste at one time are required to notify the Department of their universal waste management activities. Unlike the federal renotification exemption provision of 40 CFR § 273.32(a)(2), a large quantity handler of universal waste in Colorado who has already notified the Department of its hazardous waste management activities and has received an EPA Identification Number, is still required to renotify the Department. The Commission believes that this renotification requirement is necessary for identifying the large quantity handlers who are participating in universal waste management activities in Colorado; and completing a Notification Form is an easy way for the facilities to notify the Department. Because Colorado is not adopting a state analog to the federal renotification exemption of 40 CFR § 273.32(a)(2) this provision is more stringent than the federal regulations.

The Commission believes that regulating spent hazardous waste lamps as universal waste under the Part 273 Universal Waste Standards will lead to better management of these lamps and will facilitate compliance with the hazardous waste requirements, while still ensuring that management of these wastes is conducted in a manner that is protective of human health and the environment.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 64 FR 36466-36490, July 6, 1999.

Universal Waste Rule: Modification of the Hazardous Waste Recycling Regulatory Program

These amendments correct certain regulatory provisions that apply to regenerating and storing lead-acid batteries. The lead-acid battery provisions and the provisions for battery regeneration were mistakenly changed, deleted or incorrectly worded in the final Universal Waste Rule of May 11, 1995 (60 FR 25492). State analogs to these federal regulations were adopted by the Hazardous Waste Commission on October 17, 1995.

The amendments being adopted at this time include:

1) Revising paragraph (a) of § 267.80 to clarify the lead-acid battery regeneration exemption;

2) Revising paragraph (b) of § 267.80 to clarify that lead-acid batteries that are stored before reclamation other than regeneration must be managed in accordance with the lead-acid battery storage requirements;

3) Reinserting the spent lead acid battery storage requirements into § 267.80(b); and

4) Correcting the definition of small quantity universal waste handler found in the regulatory text of § 273.9.

Section 267.80 has also been rewritten and reorganized in an effort to make the requirements for lead-acid batteries that are to be reclaimed clearer and easier to use. Although the format of § 267.80 has been changed, no new regulatory requirements are created by these amendments.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations that were published in the Federal Register at 63 FR 71225-71230, December 24, 1998.

Revision of § 100.64(a)(3)

Paragraph (a)(3) of § 100.64 is being amended at this time to reinsert language that previously existed in the paragraph but was inadvertently omitted. This amendment provides state equivalency with the regulatory language of 40 CFR § 270.43(a)(3).

Statement of Basis and Purpose - Rulemaking Hearing of November 16, 1999

8.42 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 261, 264, 265, 268, 99 and 100 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Hazardous Remediation Waste Management Requirements (HWIR-Media)

These amendments streamline the permitting process for treatment, storage and disposal of remediation waste managed at cleanup sites. These new requirements will make it faster and easier to obtain permits for treating, storing and disposing of remediation wastes, and will provide that obtaining these permits will not subject the owner and/or operator to facility-wide corrective action. These amendments also create a new kind of unit called a “staging pile” that allows more flexibility in storing remediation waste during cleanup. These amendments also provide an exclusion from RCRA Subtitle C requirements in § 261.4 for dredged materials managed under appropriate Clean Water Act or Marine Protection, Research and Sanctuaries Act permits.

The major amendments being adopted at this time include:

1) *Adding a definition of “staging pile” in § 260.10.* A staging pile is defined as an accumulation of solid, non-flowing remediation waste (as defined in § 260.10) that is not a containment building and that is used only during remedial operations for temporary storage at a facility. Staging piles must be designated by the Director according to the requirements of § 264.554 of these regulations;

2) Adding the dredged material exclusion at paragraph (g) of § 261.4; and

3) *Establishing a new § 100.27: Remedial Action Plans (RAPs).* A Remedial Action Plan (RAP) is defined as a special form of RCRA permit that a facility owner or operator may obtain under § 100.27 of these regulations, to authorize the treatment, storage or disposal of hazardous remediation waste (as defined in § 260.10 of these regulations) at a remediation waste management site.

Under § 100.27(f)(1)(iv)(B) of the state regulations, RAPs are subject to the expanded public participation requirements in § § 100.11(f), 100.506(a)(1)(vii) and 100.506(f). In adopting state analogs to the federal RCRA expanded public participation rule (60 FR 63417-63434, December 11, 1995) the Hazardous Waste Commission adopted more stringent requirements than the provisions of 40 CFR § § 124.31, 124.32 and 124.33 regarding public participation. (Please see the Commission's Statement of Basis and Purpose for the rule-making hearing of April 16, 1996 (§ 8.23) for additional information). For this reason, § 100.27(f)(1)(iv)(B) of the state regulations is more stringent than the corresponding federal provision of 40 CFR § 270.30(d)(2).

The federal rule provides for administrative appeals of decisions to approve or deny RAP applications to EPA's Environmental Appeals Board under 40 CFR § 124.19. The state is not adopting this portion of the rule. Rather, administrative appeals of RAP applications in Colorado with be handled in accordance with the appeal procedures of 6 CCR 1007-3, Part 100.514.

The HWIR-Media provisions are less stringent than existing state standards, and Colorado is not required to adopt these provisions. The Department believes that adopting these hazardous remediation waste (HWIR-Media) management requirements will increase the pace and efficiency of hazardous waste cleanups in Colorado.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations that were published in the Federal Register at 63 FR 65874-65947, November 30, 1998.

LDR Phase IV - Hazardous Soils Treatment Standards and Exclusions

These amendments establish land disposal treatment standards specific to contaminated soil. Contaminated soil is subject to the land disposal restrictions, generally, when it contains a listed hazardous waste or when it exhibits a characteristic of hazardous waste. Prior to these amendments, contaminated soil subject to LDRs was subject to the same land disposal restriction treatment standards that apply to any other hazardous waste: soil contaminated by listed hazardous waste was subject to the standards that apply to those listed wastes and soil that exhibited a characteristic of hazardous waste was subject to the same standards that apply to the characteristic waste. These amendments establish a new treatability group: “contaminated soils”, and establishes land disposal restriction treatment standards specifically tailored to that treatability group. Under these new amendments, generators of contaminated soil have the option of complying either with the existing treatment standards for hazardous waste (i.e., the universal treatment standards), or with the new soil treatment standards being promulgated at this time.

The soil treatment standards of new § 268.49 require that all hazardous contaminated soil, including soil contaminated by listed hazardous waste, be treated for each underlying hazardous constituent reasonably expected to be present when such constituents are initially found at concentrations greater than ten times the universal treatment standard. This treatment is required both for soil contaminated by listed hazardous waste and soil that exhibits (or exhibited) a characteristic of hazardous waste. Contaminated soils will need to meet LDR treatment levels of ten times the UTS standards or achieve a 90 percent reduction in the levels of hazardous constituents present in the soil. The soil treatment standards allow this extra degree of flexibility to encourage more clean up contaminated soils rather than depending on remedies that leave untreated contaminated soils in place.

This rule also establishes a risk-based variance process in § 268.44 of the regulations for contaminated soils that might not otherwise meet the soil treatment standards. This site-specific variance from the technology-based soil treatment standards can be used when treatment to concentrations of hazardous constituents greater (i.e., higher) than those specified in the soil treatment standards minimizes short- and long-term threats to human health and the environment. In this way, on a case-by-case basis, risk-based LDR treatment standards approved through a variance process could supersede the technology-based soil treatment standards. This risk-based variance is only for contaminated soils, and does not apply to other environmental media and remediation wastes.

The amendments being adopted at this time include:

1) Adding a definition of soil at paragraph (k) of § 268.2;

2) Revising § 268.7 to include the record keeping and reporting requirements that apply to contaminated soil;

3) Establishing a site-specific variance from the technology-based soil treatment standards at § 268.44(h)(3) and (h)(4); and

4) Adding alternative LDR treatment standards for contaminated soil at § 268.49.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations that were published in the Federal Register at 63 FR 28556-28753, May 26, 1998, and as amended at 64 FR 25408-25417, May 11, 1999.

Revision of § 268.44

These revisions to § 268.44 finalize clarifying amendments to the rule authorizing treatment variances from the national LDR treatment standards, adopting EPA's interpretation that a treatment variance may be granted when treatment of any given waste to the level or by the method specified in the regulations is not appropriate, under either technical or environmental circumstances. Section 268.44 contains two types of variances. The provisions at § 268.44(a)-(g) address general treatment standard variances. Because these variances could result in nationally applicable standards for a new waste treatability group, the authority for such variances remains with EPA and is not delegable to Colorado. The provisions of 268.44(h)-(m), on the other hand, address site-specific variances, and the authority to review and approve this type of treatment variance can be delegated to Colorado by EPA.

These amendments to § 268.44 include the revisions that were published in the Federal Register on December 5, 1997 (62 FR 64504-64509) as well as the revisions from the hazardous soils treatment standards and exclusions portion of the LDR Phase IV final rule that was published in the Federal Register on May 26, 1998 (63 FR 28556-28753).

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations that were published in the Federal Register at 62 FR 64504-64509, December 5, 1997, and as amended at 63 FR 28556-28753, May 26, 1998.

Revision of Part 99

The Part 99 Notification requirements are being amended at this time to update the reference to EPA Form 8700-12. The title of the form was revised from “Notification of Hazardous Waste Activity” to “Notification of Regulated Waste Activity” when the Part 279 standards for the management of used oil were added to the hazardous waste regulations. The references to EPA Form 8700-12 in Part 99 are being revised at this time to reflect this change.

Statement of Basis and Purpose - Rulemaking Hearing of February 15, 2000

8.43 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 261, 262 and 268 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

LDR Phase IV - Mineral Processing Secondary Materials Exclusion

These amendments provide for a conditional exclusion from the definition of solid wastes for mineral processing secondary materials. This rule amends the current regulations at § 261.2(c)(3) defining which "secondary materials" (sludges, by-products and spent materials) being generated by and reclaimed by mineral processing or beneficiation facilities are solid waste. These amendments create a conditional exclusion at § 261.4(a)(17) of the regulations for mineral processing secondary materials. The conditional exclusion requires that:

(1) The mineral processing secondary materials must be legitimately recycled to recover metal, acid, cyanide, water, or other values;

(2) The mineral processing secondary materials cannot be accumulated speculatively;

(3) The mineral processing secondary materials may not be stored on the land before they are reclaimed; and

(4) Facilities utilizing this conditional exclusion must submit a one-time notification of their recycling activities to the Department describing: the materials being recycled and the processes into which they are recycled; where storage units are located and their design. Facilities must update the notification if their recycling activities change.

These amendments are less stringent than existing state standards, and Colorado is not required to adopt these provisions. The intended effect of this exclusion is to encourage safe recycling of mineral processing secondary materials by reducing regulatory obstacles to recycling, while ensuring that hazardous wastes are properly treated and disposed.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations that were published in the Federal Register at 63 FR 28556-28753, May 26, 1998, and as amended at 64 FR 25408-25417, May 11, 1999.

LDR Phase IV - Bevill Exclusion Revision

These amendments to § 261.4(b)(7) of the regulations allow secondary materials from mineral processing to be co-processed with normal raw materials in beneficiation operations which generate Bevill exempt wastes, without changing the exempt status of the resulting Bevill waste, provided that legitimate recovery of the mineral processing secondary material is occurring, and provided that primary ores and minerals account for at least 50 percent of the feedstock.

These amendments are less stringent than existing state standards, and Colorado is not required to adopt these provisions. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations that were published in the Federal Register at 63 FR 28556-28753, May 26, 1998, and as amended at 64 FR 25408-25417, May 11, 1999.

LDR Phase IV - Exclusion of Recycled Wood Preserving Wastewaters

These amendments at § 261.4(a)(10) of the regulations provide an exclusion from the definition of solid waste for certain materials generated and recycled by the wood preserving industry. Specifically, these amendments exclude certain wood preserving wastewaters and spent wood preserving solutions from classification as solid waste under RCRA. Any wood preserving plant claiming the exclusion for these wastes would need to manage them according to the following criteria:

1) the materials must be recycled and reused on-site in the production process for their original intended purpose;

2) the materials must be managed to prevent release;

3) the plant must assure that the units managing these materials can be visually or otherwise determined to prevent releases; and

4) drip pads managing these materials must comply with Subpart W drip pad standards regardless of whether the plant has been classified as a conditionally exempt small quantity generator (CESQG) as defined in § 261.5 of the regulations.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations that were published in the Federal Register at 63 FR 28556-28753, May 26, 1998.

Petroleum Refining Process Wastes

These amendments add four petroleum refining process wastes (K169-K172) to the list of RCRA hazardous wastes from specific sources in § 261.32, and establish land disposal restrictions (LDR) treatment standards for these wastes. These amendments also expand the conditional exemptions from the definition of solid waste to include three types of petroleum residues: 1) oil-bearing residues (secondary materials) from petroleum refining operations, 2) recovered oil from associated organic chemical manufacturing facilities, and 3) spent liquid treating caustic solution used as feedstock in cresylic or naphthenic acid production.

The amendments being adopted at this time include:

1) Revising the table at § 261.32 to add listings for the following four petroleum refining process wastes:

   K169 - Crude oil storage tank sediment from petroleum refining operations;

   K170 - Clarified slurry oil tank sediment and/or in-line filters/separation solids from petroleum refining operations;

   K171 - Spent hydrotreating catalysts, and

   K172 - Spent hydrorefining catalysts.

2) Establishing LDR treatment standards for the newly listed wastes in § 268.35 and § 268.40;

3) Adding § 261.3(c)(2)(ii)(E) to exclude inert support media separated from spent hydrotreating and hydrorefining catalyst from the definition of hazardous waste;

4) Revising the hazardous waste listing for F037 in § 261.31(a) to include residues generated from processing or recycling excluded oil-bearing secondary materials that met a listing description when originally generated and are disposed, or intended for disposal;

5) Adding the wastes' hazardous constituents to Appendix VII of Part 261;

6) Expanding the conditional exemption from the definition of solid waste for recovered oil at § 261.4(a)(13); and

7) Adding exemptions at the newly promulgated § 261.4(a)(18) and § 261.4(a)(19) for recovered oil from associated organic chemical manufacturing facilities and spent liquid caustic solutions used as feedstocks to produce cresylic or naphthenic acid.

The revisions to § 261.32, Part 261 Appendix VII, § 268.35 § 268.40 are HSWA provisions and are more stringent than the current state provisions. In order to maintain its authorization to operate its state program in lieu of the U.S. Environmental Protection Agency operating a federal program, Colorado must adopt state requirements equivalent to and consistent with the overlying federal requirements. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

The Hazardous Waste Commission is not adopting a state analog to the revisions made to 40 CFR § 266.100(b)(3). Section 266.100 is part of 40 CFR Part 266, Subpart H regulations concerning “Hazardous Waste Burned in Boilers and Industrial Furnaces”. Colorado has not adopted a state analog to 40 CFR Part 266, Subpart H at this time.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations that were published in the Federal Register at 63 FR 42110-42189, August 6, 1998.

Petroleum Refining Process Wastes - Leachate Exemption

These amendments at § 261.4(b)(15) of the regulations provide a temporary exemption from the definition of hazardous waste for leachate and gas condensate derived from landfill disposal of petroleum refining process wastes (K169-K172). Prior to being listed as hazardous wastes, these petroleum refining process wastes were typically disposed in industrial and municipal solid waste landfills.

This conditional exemption does not apply if the leachate and gas condensate exhibit a hazardous waste characteristic (i.e., ignitability, corrosivity, reactivity, and/or toxicity) or are derived from any other listed hazardous waste in addition to the K169-K172 listings. Additional conditions for the deferral include: 1) discharge of the leachate and gas condensate must be regulated under the Clean Water Act (CWA), and 2) the generated wastes may not be placed in surface impoundments after February 13, 2001, except under emergency conditions.

The Environmental Protection Agency (EPA) is currently examining the issue of integrating RCRA and CWA regulations for the purpose of leachate management during this deferral period. Once EPA has taken final action on this issue, the Hazardous Waste Commission will notice and conduct a rulemaking hearing to consider any necessary amendments to this rule.

These amendments are less stringent than existing state standards, and Colorado is not required to adopt these provisions. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations that were published in the Federal Register at 64 FR 6806-6814, February 11, 1999.

Corrections to the LDR Phase IV Rule

These amendments correct technical errors that were identified after Colorado adopted state analogs to the federal Land Disposal Restrictions (LDR) Phase IV rule.

The amendments being adopted at this time include:

1) Revising the table at § 261.32 to remove the five K-code wastes (K064, K065, K066, K090 and K091) that were vacated on April 9, 1999 in *Great Lakes Chemical Co. v EPA* (No. 98-1312 (D.C.Cir.));

2) Revising § 262.34(a)(4) to change an internal citation reference from § 268.7(a)(4) to § 268.7(a)(5) to reflect some other regulatory changes to LDR paperwork requirements that had been adopted earlier; and

3) Removing the erroneous reference to “mg/l TCLP” for the nonwastewater arsenic standard for the K088 entry in the § 268.40 table “Treatment Standards for Hazardous Waste”.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations that were published in the Federal Register at 64 FR 56469-56472, October 20, 1999.

Correction of Typographical Errors and Omissions

In addition, these amendments also correct typographical errors and inadvertent omissions that occur in the regulations.

Statement of Basis and Purpose - Rulemaking Hearing of June 20, 2000

8.44 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 100 and Part 6 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Test Procedures for the Analysis of Oil and Grease and Non-Polar Material

On May 14, 1999 (64 FR 26315-26327), the Environmental Protection Agency (EPA) approved (effective June 14, 1999) two non-chlorofluorocarbon (non-CFC) test methods that can be used for oily waste determinations in the RCRA hazardous waste program: Method 1664 (Revision A) for aqueous solutions and Method 9071B for solid and semi-solid materials. Methods 1664 and 9071B employ n-hexane as the extraction solvent in place of 1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113), a Class I CFC.

EPA-approved analytical test methods under Subtitle C of RCRA are contained in OSW publication SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. Use of some of these methods is required by some of the hazardous waste regulations under Subtitle C of RCRA. In other situations, SW-846 functions as a guidance document setting forth acceptable, although not required, methods to be implemented by the user, as appropriate, in satisfying RCRA-related sampling and analysis requirements. As of Update III to SW-846, the two SW-846 methods for determination of oil and grease have been Method 9070 for waters and aqueous wastes, and Method 9071A for solid and semi-solid material such as soil, sediment, and sludge. Although these methods are not specifically required by any RCRA regulation, they can be required as part of a hazardous waste de-listing demonstration.

The amendments being adopted at this time are contained in Update IIIA to SW-846 and include the following changes:

1) Method 9070, which uses CFC-113, is deleted and replaced with a referral to the EPA Method 1664 (Revision A) for oil and grease determinations involving waster and aqueous wastes matrices. *EPA Method 1664, Revision A: N-Hexane Extractable Material (HEM; Oil and Grease) and Silica Gel Treated N-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry* is incorporated by reference in the RCRA regulations at § 26.11(a)(16) and in SW-846 under new Method 9070A.

2) Method 9071B is added as part of Update IIIA to SW-846. Method 9071B specifies the use of n-hexane as the extraction solvent is place of Freon 113 for oil and gas determinations in solid and semi-solid materials such as soil, sediment, and sludge.

Electronic versions of SW-846 Update IIIA, Method 1664 and Method 9071B are available via the Internet at http://www.epa.gov/epaoswer/hazwaste/test/txupiiia.htm. Copies of these test methods are also available for review at the Colorado Department of Public Health and Environment and at the State Publications Depository Libraries.

These amendments provide state equivalency with the regulatory language of the May 14, 1999 federal rule and support EPA's effort to protect Earth's ozone layer by reducing dependency on use of chlorofiuorocarbons (CFCs), and to meet the CFC phaseout agreed to in the Montreal Protocol and required by the Clean Air Act Amendments of 1990. Laboratory use of CFCs are scheduled to be phased out in 2005 under EPA's stratospheric ozone protection regulations.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations that were published in the Federal Register at 64 FR 26315-26327, May 14, 1999.

Revision of § 100.31(c)

In response to House Bill 99-1048 concerning limitations on the amount a governmental entity may charge as a result of the late payment of an amount due and owing to such entity, Section 100.31(c) of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) is being revised at this time to specify that the late payment of 2% per month or the portion thereof that is assessed on the unpaid balance is subject to the limitations of § 24-79.5-101. et seq. C.R.S. House Bill 99-1048 is intended to extend some of the protections found in the consumer protection laws to citizens who receive goods or services from state and local governments but who pay for such goods or services after a scheduled due date.

Revision of § 100.32(b)

Section 100.32(b) is being amended at this time to revise the Department's document review and activity fee of $85/hour to $l00/hour. The new fee is designed to provide reimbursement to the Department for professional staff and administrative personnel time spent on the various document review and activities as described in § 100.32(a)(1) and (2) of the regulations. The new document review and activity fee is necessary in order to offset the Department's increased costs for conducting such activities since the fee was last revised in 1991.

This amendment is being made pursuant to SB00-177, which provides for changes in funding for the Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division.

Amendment of § 6.04

Section 6.04 is being amended by revising paragraph (a) to reflect the annual Commission fees to be assessed for fiscal year 2000-2001.

Statement of Basis and Purpose - Rulemaking Hearing of June 20, 2000

8.44 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 261 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of Part 261. Appendix IX to Conditionally Delist F006/F019 Hazardous Waste Generated by AAA Plating. Inc. (AAA Plating), located at 7777 40th Avenue in Denver Colorado, 80205.

Appendix IX of Part 261 is being amended at this time to conditionally delist F006/F019 hazardous waste generated at AAA Plating in Denver, Colorado. This delisting will allow AAA Plating to dispose of its waste at a Solid Waste Landfill which meets the requirements of the Colorado Solid Waste Regulations 6 CCR 1007-2, provided it complies with the conditions of the delisting. Alternatively, AAA Plating may recycle the wastewater treatment sludge at a metal reclamation facility for the recovery of heavy metals.

AAA Plating operates a commercial electroplating and chemical conversion coating operation located in Denver, Colorado. The facility generates a wastewater treatment sludge that is classified as a F006/F019 listed hazardous waste. The F006 hazardous waste listing in § 261.31 describes wastewater treatment sludge that is generated from electroplating operations. The F019 hazardous waste listing in 261.31 describes wastewater treatment sludge that is generated from the chemical conversion coating of aluminum. Because the wastewater treatment sludge generated by AAA Plating is not segregated as to electroplating or chemical conversion coating, the sludge carries both the F006 and the F019 listed waste codes. The basis for each hazardous waste listing is described in Appendix VII of Part 261. Each listing is based on hazardous constituents which are generally contained in wastes described by the listing. The hazardous constituents that formed the basis for the F006 listing include cadmium, hexavalent chromium, nickel, and cyanide (complexed). The hazardous constituents that formed the basis for the F019 listing are hexavalent chromium and cyanide (complexed).

The wastewater treatment system at the plant generates a dry sludge weight of approximately 10 tons per month. Industrial wastewater produced from the electroplating and chemical conversion coating operations at the facility is collected by containment trenches which flow to large holding tanks. Wastewater proceeds through a series of processes in which the pH is adjusted, and metals are precipitated out with a reducing agent. The metals are then filtered out and concentrated using a microfiltration device and concentrate tank. Ultimately, the concentrated solids are processed through a filter press to remove the liquid and form the F006/F019 sludge cake, which is then dried further through the use of a sludge drying unit.

Analytical sampling of the F006/F019 sludge was conducted prior to the submission of the waste delisting petition. The electroplating and chemical conversion coating processes do not significantly change on a day-to-day basis. The collected samples adequately represent the waste stream. The Hazardous Materials and Waste Management Division at the Colorado Department of Public Health and Environment (the Division), evaluated the sampling results and the request for petitioning of the waste in accordance with § 260.22. This evaluation was provided to the Commission.

The results of the waste sampling indicated that the waste did not contain detectable concentrations of hexavalent chromium. The results of the analysis did indicate that the waste contained detectable concentrations of cadmium, complexed cyanide, and nickel. However, based on health based risk assessment calculations derived using the general assumptions outlined in the Division's current risk assessment policy, the waste did not contain concentrations of these constituents at levels which would be considered harmful to human health or the environment.

Analytical sampling of the waste also indicated that the waste contained detectable concentrations of arsenic, barium, lead, and silver. Based on health based risk assessment calculations and average background soil conditions, the Division determined that the waste did not contain concentrations of barium, lead, or silver at levels which would be considered harmful to human health or the environment. However, the results of the health based risk assessment indicated that the concentration of arsenic in the waste did pose an unacceptable risk to human health and the environment if humans were directly exposed to the waste in a residential setting. Although the assessment showed that the level of arsenic in the waste was too high to support an unconditional delisting of the waste, further evaluation of the physical and chemical nature of the waste indicated that the waste did not pose an unacceptable risk to human health or the environment if subject to certain conditions regarding its handling and disposal in a solid waste landfill or via reclamation of the heavy metals contained in the wastewater treatment sludge.

The potential for constituents in the waste to leach out and contaminate groundwater was evaluated by the Division using TCLP analytical tests which measure the maximum potential for constituents to be released from the waste. The results of the TCLP analysis indicated that hexavalent chromium, lead, mercury, selenium, and silver do not show any chemical potential to leach out of the waste, and that arsenic, barium, cadmium, and nickel showed only small potentials to be leached from the waste which are adequately protected against in a solid waste landfill setting or if the sludge is sent for reclamation of heavy metals.

Further, the results of the waste sampling indicated that the waste sludge does not contain any organic constituents. Consideration of the potential health effects caused by exposure to these constituents was therefore not considered in evaluating the petition by the Division.

This delisting is being granted under conditions which specify disposal requirements, specify recordkeeping requirements, and storage requirements for the delisted sludge. Conditional delisting of the waste also prohibits any major changes to the electroplating or chemical conversion coating processes or wastewater treatment process without prior notification, evaluation, and approval by the Division.

This delisting does not apply to waste which demonstrates “significant changes” as defined in Delisting #002 in Part 261, Appendix IX-Wastes excluded under § 260.20 and § 260.22(d), or if any of the conditions specified in Part 261, Appendix IX for this delisting are not met. Should either of these occur, the waste is and must be managed as a hazardous waste. While the Division has approved a conditional delisting for this specific waste at this specific site, the findings and criteria associated with the approval are unique. Other petitions for delisting, even if similar in material or use, will be reviewed by the Division on a case-by-case basis.

Statement of Basis and Purpose - Rulemaking Hearing of November 21, 2000

8.45 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 261, 262, 264, 265, 268, 273 and 100 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Generator Fee Amendments

In the 2000 Legislative Session, the Legislature enacted SB 00-177. This bill established some general policies for implementing the state hazardous waste control program. It also authorized imposition of annual fees for certain generators of hazardous waste, and established criteria for the Commission to consider in making future adjustments to the T/S/D facility and generator annual fees schedules, and to the document review fee schedules. Under SB 177, the T/S/D, generator, and document review fees are frozen until after June 2002.

The purpose of these amendments to part 100 is to update the fee regulations to reflect these modifications. The amendments also broaden the annual review of annual operating fees to include all fees assessed under sections 100.31 and 100.32, and require that the annual review consider the relevant criteria set forth in section 25-15-302(3.5)(b), C.R.S.

SB 00-177 also amended section 25-15-103, C.R.S., to authorize the Department to charge its actual cost of providing compliance assistance. However, the amendment prohibits the Department from charging fees for the first two-hours of company-specific compliance assistance in any given fiscal year. The amendments to Section 103 are self-implementing and do not require any implementing regulations.

Hazardous Waste Mercury-Containing Devices

These amendments add regulations for the management of hazardous waste mercury-containing devices under the Part 273 Universal Waste Management Standards. The universal waste management standards consist of streamlined regulations designed to address the management of certain widely generated hazardous wastes, known as “universal wastes”.

The original federal Part 273 Universal Waste Regulations were published in a May 11, 1995 final rule (60 FR 25492-25551) and addressed the management of waste batteries, certain waste pesticides, and waste mercury-containing thermostats. The Colorado Hazardous Waste Commission adopted state analogs to these federal requirements on October 17, 1995. On January 16, 1996, the Commission adopted state regulations adding standards for the collection and management of waste aerosol cans under the Part 273 universal waste regulations. On July 6, 1999, EPA issued a final rule adding hazardous waste lamps to the federal list of universal wastes regulated under the Resource Conservation and Recovery Act (RCRA). The Colorado Hazardous Waste Commission adopted state analogs to these federal requirements on October 19, 1999. The present amendments expand the scope of Colorado's Part 273 universal waste regulations by replacing the current state management standards for hazardous waste mercury-containing thermostats with state management standards for other hazardous waste mercury-containing devices. The new definition of mercury-containing devices includes mercury-containing thermostats.

The Part 273 universal waste regulations contain provisions for adding additional waste types to the universal waste system in the future. Subpart G of Part 273 describe the criteria and procedures involved in petitioning to have additional hazardous wastes added to the Part 273 universal waste regulations. This petition process enhances state flexibility by allowing states to add waste(s) to its universal waste program without requiring the waste(s) to be added at the federal level. In order for a petition to be successful, it must be demonstrated that regulation under the universal waste system is appropriate, and that the Part 273 requirements will improve waste management practices for the waste(s).

After receiving requests from industry to add other mercury-containing devices to the universal waste regulations, the Commission has proposed that management standards for mercury-containing thermostats be replaced with management standards for mercury-containing devices (which also includes mercury-containing thermostats) under the universal waste regulations of Part 273.

Evaluation of the factors outlined in Subpart G of Part 273 for adding new universal wastes supports management of waste mercury-containing devices as a universal waste.

a) Mercury-containing devices frequently exhibit one or more characteristics of hazardous waste.

b) Waste mercury-containing devices are not exclusively generated by any specific industry or group of industries. Waste mercury-containing devices are commonly generated by a wide variety of types of generators including households, medical clinics, hospitals, the electronics industry, conditionally exempt small quantity generators, small businesses, pipeline monitoring companies, and other industrial operations. Waste mercury-containing devices generated by regulated hazardous waste generators are fully regulated as hazardous waste, whereas waste mercury-containing devices generated by exempt households are not subject to RCRA Subtitle C controls.

c) Waste mercury-containing devices are commonly generated by a large number of generators, and are frequently generated in relatively small quantities by each generator. The use of mercury-containing devices is pervasive throughout several industrial sectors.

d) Requirements for the collection of waste mercury-containing devices have been developed to ensure close stewardship of the waste and prevent releases of any universal waste or component of universal waste to the environment. Specific universal waste mercury-containing device management conditions that have been added include:

    1) requiring handlers of universal waste mercury-containing devices to immediately contain any universal waste mercury-containing device that shows evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions in a separate individual container that is closed, sound, and compatible with the mercury-containing device; and 2) requiring that any universal waste mercury-containing device and/or any container in which the universal waste mercury-containing device are contained or accumulated to be properly labeled or marked to identify the types of universal waste being managed.

e) Specific waste management regulations for waste mercury-containing devices have been added at § § 273.13(c) and 273.33(c) to ensure that management of these waste is conducted in a manner that is protective of human health and the environment. Specific universal waste mercury-containing device management conditions that have been added include: 1) requiring handlers to ensure that incompatible wastes are separated and managed appropriately; 2) requiring a written procedure to be developed if the handler will be removing elemental mercury from open-ended mercury-containing devices to ensure proper and safe removal practices and 3) requiring that any universal waste mercury-containing device, and/or any container in which universal waste mercury-containing device are contained or accumulated, are properly labeled or marked to identify the type of universal waste being managed.

f) The Commission believes that simplifying and streamlining the requirements associated with collection and handling of waste mercury-containing devices will, divert these wastes from their disposal in municipal waste systems and channel them into proper recycling and management activities, subsequently encouraging the development of more efficient and effective collection systems. Such collection systems will, in turn, facilitate collection of not only the regulated portion of the waste stream, but also the unregulated portion of the waste stream.

g) The Commission believes simplifying the standards for management of mercury-containing devices by regulating them as universal waste under the Part 273 universal waste regulations will improve implementation of and compliance with the hazardous waste regulatory program while providing adequate protection of human health and the environment.

The requirements as proposed would offer a conditional exemption from the current Subtitle C hazardous waste requirement for universal waste mercury-containing devices. Compliance with the reduced set of Part 273 requirements would be an option that waste handlers may voluntarily choose. Operating under the Part 273 regulations would not be compulsory. If universal waste handlers wish, they may instead continue to manage their hazardous waste mercury-containing devices under the full RCRA Subtitle C regulations. If they do elect to follow the reduced Part 273 requirements, they would be subject to a number of conditions designed to provide adequate protection of human health and the environment.

Both small and large quantity handlers must follow specific requirements when handling universal waste mercury-containing devices, including specific packaging standards to prevent breakage of waste mercury-containing devices during accumulation, storage, and transport. In addition, these amendments require that waste mercury-containing devices be managed in a way that prevents releases of mercury or other hazardous constituents to the environment during accumulation, storage, and transport.

In adopting state universal waste standards for waste mercury-containing devices, the Commission is also adding standards to allow generators of such mercury-containing devices to remove mercury-containing ampules from the devices as was allowed with mercury-containing thermostats, and remove elemental mercury from open-ended mercury-containing devices on-site before sending it off-site for recycling, treatment or disposal. With the adoption of the universal waste management standards for hazardous waste mercury-containing devices, universal waste handlers will be able to remove the mercury ampules or remove elemental mercury from open-ended mercury-containing devices in accordance with the requirements outlined in § § 273.13(c) and 273.33(c) of the Part 273 universal waste regulations. A hazardous waste determination must still be made on the remaining mercury-containing device units and filters prior to disposal or recycling. The Commission believes that the removal of mercury-containing ampules and elemental mercury from open-ended mercury-containing devices under specific controlled standards will ensure protection of human health and the environment, and provide equivalence with the federal regulations.

As part of the waste management standards of § § 273.13(c) and 273.33(c), handlers who remove elemental mercury from open-ended waste mercury-containing devices are required to ensure that the universal waste mercury-containing devices are drained only over or in a containment device that is designed to prevent the release of any universal waste or component of universal waste to the environment. The universal waste handler must also ensure that the draining operations are performed safely by developing and implementing a written procedure detailing how to safely drain the universal waste mercury-containing devices. This procedure must include: the type of equipment to be used to drain the universal waste mercury-containing devices safely; operation and maintenance of the equipment; segregation of incompatible wastes; proper waste management practices; and waste characterization.

Handlers of universal waste who drain waste mercury-containing devices, or who generate other solid waste as a result of such activity, are required to determine whether the residues and/or other solid waste are a listed hazardous waste, or if they exhibit a characteristic of hazardous waste. If the generated waste is a listed hazardous waste, or exhibits a characteristic of hazardous waste, it must be managed in compliance with all applicable requirements of Parts 260 through 268, and Parts 99 and 100 of the Colorado Hazardous Waste Regulations 6 CCR 1007-3. If the generated waste is not a listed hazardous waste, or does not exhibit a characteristic of hazardous waste, it is not subject to the hazardous waste requirements, nor is it subject to the requirements of Part 273. This waste is, however, required to be handled in compliance with applicable federal, state, or local solid waste regulations. The draining of universal waste mercury-containing devices may also require the use of control devices to capture airborne contamination.

Labeling and Marking requirements for universal waste mercury-containing devices are also being added at this time. Under § § 273.14 and 273.34, a universal waste handler managing waste mercury-containing devices at his/her facility is required to label each individual mercury-containing device or container or package in which such mercury-containing devices are contained or accumulated, with the words "Universal Waste - Mercury-Containing Device(s)", or "Waste Mercury-Containing Device(s)", or "Used Mercury-Containing Device(s)."

180-Day Accumulation Time under RCRA for Waste Water Treatment Sludges from the Metal Finishing Industry

These amendments allow large quantity generators of F006 waste (sludges from the treatment of electroplating wastewaters) up to 180 days (or up to 270 days, if applicable) to accumulate F006 waste without a hazardous waste storage permit or interim status, provided that the generator: 1) recycles the F006 waste by metals recovery, 2) accumulates no more than 20,000 kilograms of F006 waste on-site at any one time, 3) implements pollution prevention practices that reduce the volume or toxicity of the F006 waste or that make it more amendable for metals recovery, and 4) complies with the applicable management standards in the rule (See § 262.34(g)-(i)).

These amendments provide state equivalency with the federal rule that was published in the Federal Register on March 8, 2000 [65 FR 12378-12398]. These amendments are considered less stringent than the existing state regulations because it allows more than the existing 90 days of accumulation time that is in the existing regulations. Colorado is, therefore, not required to adopt state analogs to these requirements. The Department believes that the 180-day accumulation time will minimize economic barriers to recycling of F006 through metals recovery, thus providing generators of F006 waste with an incentive to choose metals recovery over treatment and land disposal of their waste management option for F006 waste.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations that were published in the Federal Register at 65 FR 12378-12398, March 8, 2000.

Statement of Basis and Purpose - Rulemaking Hearing of June 19, 2001

8.46 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 261, 264, 265, 268, 273 and 100 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Addition of Electronic Devices and Electronic Components to the Part 273 Universal Waste Regulations

At the October 17, 1995 Hazardous Waste Commission Hearing, the Commission adopted regulations governing the collection and management of certain widely generated wastes, known as “universal wastes”. The Part 273 universal waste regulations currently address the management of waste batteries (i.e., nickel cadmium), certain waste pesticides, waste mercury-containing devices, aerosol cans containing hazardous waste, and mercury-containing lamps. The Part 273 universal waste regulations provide a conditional exemption from full Subtitle C regulation for certain universal wastes, while still ensuring that management of these wastes is conducted in a manner that is protective of human health and the environment. The Part 273 regulations reduce the management requirements for generators, consolidation points (small and large quantity handlers of universal waste), and transporters. By relaxing the standards, collection of universal waste is simplified, thereby encouraging the establishment of and participation in environmentally-sound collection and recycling programs by generators and handlers of universal wastes. Increasing the availability of these collection and recycling programs will subsequently strengthen environmental protection by encouraging that these universal wastes are treated or recycled in facilities subject to the full hazardous waste regulations rather than disposed of, as many currently are, in municipal solid waste landfills and incinerators.

The Part 273 universal waste regulations also contain provisions for adding additional waste types to the universal waste system in the future. Subpart G of Part 273 describes the criteria and procedures involved in petitioning to have additional hazardous wastes added to the Part 273 universal waste regulations. This petition process enhances state flexibility by allowing states to add waste(s) to its universal waste program without requiring the waste(s) to be added at the federal level. In order for a petition to be successful, it must be demonstrated that regulation under the universal waste system is appropriate, and that the Part 273 requirements will improve waste management practices for the waste(s).

These amendments expand the scope of Colorado's current Part 273 universal waste regulations by adding state management standards for hazardous waste electronic devices, such as color monitors and color televisions, and certain electronic components in central processing units (CPUs), printers, mainframes or other equipment with complex circuitry. The proposed regulations are less stringent than the current state program, and Colorado is not required to adopt these less stringent provisions. These amendments, in conformity with the existing federal Part 273 universal waste regulations, allow for modified standards for storing, transporting, and collecting hazardous waste electronic devices and components.

Color monitors, color televisions, CPUs and other electronic devices have printed circuit boards or other complex circuitry that contain heavy metals such as silver, chromium, and lead that likely exceed the toxicity characteristics for these constituents. Some older CPUs contain mercury switches, and many kinds of electronic devices contain batteries including nickel-cadmium or sealed lead acid. In addition, the most recent data available to the Department demonstrates that waste cathode ray tubes (CRTs) from color monitors and color televisions consistently exceed the regulatory limit for lead when tested using the toxicity characteristic leaching procedure (TCLP). Due to their notable weight and size, CRTs comprise a significant portion of the overall monitor or television and will cause the entire unit to be considered hazardous waste. If a non-residential waste color monitor or color television has not been tested to show that it is not hazardous, or if the generator doesn't have other supporting data such as manufacturer's information to show otherwise, then the generator should assume a color monitor or color television destined for disposal is hazardous and manage it as hazardous waste. Colorado regulations prohibit non-residential sources from disposing of hazardous wastes in solid waste landfills. CRTs associated with monochrome monitors and black & white televisions do not tend to fail the toxicity test for lead and are generally not considered hazardous waste. These may be managed as solid waste.

Generally, color monitors, color televisions, or other electronic devices destined for recycling are not considered wastes, but are considered useable and useful equipment. Typically, the decision on whether a piece of electronic equipment is a waste or not is made by the recycler. The recycler determines whether the unit can be resold, donated, or otherwise repaired or refurbished as a useable item. The recycler may also dismantle the equipment to directly reuse or sell parts from the equipment and it is not until the recycler determines that the equipment or disassembled components are no longer useable that a waste is generated. In this case, the recycler is considered to be the generator of the waste and is responsible for proper waste management. Businesses, academic institutions, and government agencies that send their color monitors, color televisions, or other electronic devices to a recycler are not considered hazardous waste generators for those materials.

With the exception of color monitors and televisions, many waste electronic devices, if left intact, probably do not fail the toxicity test for heavy metals. Individual components that have been removed from the disassembled devices may fail the toxicity test. The regulatory status of each device or component will depend on how each item is disposed or recycled.

Evaluation of the factors outlined in Subpart G of Part 273 for adding new universal wastes supports management of waste electronic devices and components as a universal waste.

a) Many used electronic devices and electronic components exhibit one or more characteristics of hazardous waste, frequently failing the toxicity test for heavy metals. Typical wastes include computer monitors, circuit boards and batteries removed from central processing units (CPUs), televisions, mainframes, and other related devices.

b) Waste electronic devices are not exclusively generated by any specific industry or group of industries. Waste electronic devices are commonly generated by a wide variety of types of generators, including households, retail and commercial businesses, office complexes, conditionally exempt small quantity generators, small businesses, government organizations, as well as major industrial operations. Currently, if an electronic device or its disassembled components are hazardous waste, they must be managed under the full RCRA Subtitle C regulation; whereas waste electronic devices generated by exempt households are not subject to RCRA Subtitle C controls.

c) Waste electronic devices are commonly generated by a large number of generators, and are frequently generated in relatively small quantities by each generator. The use of electronic devices is pervasive throughout all levels of industry.

d) Specific universal waste electronic device and electronic component management conditions that have been added include: 1) requiring handlers of universal waste electronic devices and electronic components to immediately contain any universal waste electronic device or electronic component that shows evidence of damage that could cause leakage under reasonably foreseeable conditions in a separate individual container that is sound and compatible with the contents of the universal waste electronic device or electronic component; and 2) requiring that any universal waste electronic device or electronic component, and/or any container in which the universal waste electronic device or electronic component are contained or accumulated, are properly labeled or marked to identify the type of universal waste being managed.

e) Waste electronic devices and electronic components pose a relatively low level of risk during accumulation and transport in comparison to other hazardous wastes, and specific waste management regulations for waste electronic devices and electronic components have been added in § § 273.13(f)and 273.33(f) to ensure that management of these wastes is conducted in a manner that is protective of human health and the environment. Both small and large quantity handlers must follow specific requirements when handling universal waste electronic devices and electronic components, including: 1) requiring handlers to ensure that incompatible wastes are separated and managed appropriately; 2) requiring a written procedure to be developed if the handler will be disassembling universal waste electronic devices to ensure proper and safe management of materials and equipment; and 3) requiring that the universal waste handler maintain a system (i.e., signs or written records, etc.) to ensure compliance with the written management procedures.

f) The Colorado Department of Public Health and Environment believes that simplifying and streamlining the requirements associated with collection and handling of waste electronic devices and electronic components will divert these wastes from their disposal in municipal waste systems and channel them into proper recycling and management activities, subsequently encouraging the development of more efficient and effective collection systems. Such collection systems will, in turn, facilitate collection of not only the regulated portion of the waste stream, but also the unregulated portion of the waste stream.

g) The Colorado Department of Public Health and Environment believes simplifying the standards for management of electronic devices and electronic components by regulating them as universal waste under the Part 273 universal waste regulations will improve implementation of and compliance with the hazardous waste regulatory program while providing adequate protection of human health and the environment.

The requirements proposed today would offer a conditional exemption from the current Subtitle C hazardous waste requirements for universal waste electronic devices and electronic components. Compliance with the reduced set of Part 273 requirements would be an option that waste handlers may voluntarily choose. Operating under the Part 273 regulations would not be compulsory. If universal waste handlers wish, they may instead continue to manage their hazardous waste electronic devices and electronic components under the full RCRA Subtitle C regulations. If they do elect to follow the reduced Part 273 requirements, they would be subject to a number of conditions designed to provide adequate protection of human health and the environment.

Included in the waste management standards of § § 273.13 and 273.33 are requirements for handlers who choose to disassemble electronic devices into separate components or subassemblies as part of their universal waste management activities. As part of the device management standards of § § 273.13(f) and 273.33(f), handlers who disassemble electronic devices are required to: ensure that the universal waste devices are disassembled in a manner designed to prevent the release of any universal waste or component of universal waste to the environment; ensure that the disassembly operations are performed safely by developing and implementing a written procedure detailing how to safely disassemble each universal waste electronic device managed at the facility; ensure that necessary equipment is readily available to immediately clean up releases which may occur during disassembly operations; immediately segregate and containerize the separated components; maintain a system (i.e., signs or written records, etc.) to ensure compliance with the written management procedures; and ensure that employees are thoroughly familiar with the procedures for disassembling electronic devices, proper waste handling and emergency procedures. The Department believes that the disassembling of waste electronic devices under specific controlled standards will ensure protection of human health and the environment, and provide equivalence with the federal regulations.

Handlers of universal waste who disassemble electronic devices into components, or who generate other solid waste as a result of such activities must determine whether the separated components and/or other solid wastes exhibit a characteristic of hazardous waste. If the separated electronic components or other solid wastes generated exhibit a characteristic of hazardous waste, they must be managed in compliance with all applicable requirements of Parts 260 through 268, and Parts 99 and 100 of the Colorado Hazardous Waste Regulations 6 CCR 1007-3. Alternatively, separated electronic components generated may continue to be managed as universal wastes under Part 273. If the separated electronic components do not exhibit a characteristic of hazardous waste, they are not subject to the hazardous waste requirements, nor are they subject to the requirements of Part 273. This waste is, however, required to be handled in compliance with applicable federal, state, and local solid waste regulations.

Labeling and Marking requirements for universal waste electronic devices and electronic components are also being added at this time. Under § § 273.14 and 273.34, a universal handler managing waste electronic devices and electronic components at his/her facility is required to label each individual electronic device or electronic component, or the container in which the devices or components are contained or accumulated, with the words “Universal Waste-Electronic Device(s),” “Universal Waste - Electronic Component(s)”, “Used Electronic Device(s),” “Used Electronic Component(s),” “Waste Electronic Device(s),” or “Waste-Electronic Component(s)”. The name of the electronic device or electronic component may be substituted for the words “electronic device” or “electronic component.”

This rule is an example of the Colorado Department of Public Health and Environment's effort to reduce regulatory burdens on affected parties without compromising environmental protection. Relaxing the standards for handlers of universal waste should simplify the collection of these universal wastes and encourage the establishment of collection and recycling programs. Increasing the availability of environmentally-sound collection and recycling programs should subsequently strengthen environmental protection of human health and the environment by encouraging that these universal wastes be treated or recycled in facilities subject to the full hazardous waste regulations rather than disposed of in municipal solid waste landfills and incinerators.

Amendment of § § 268.2(h) and 268.9(d)(2)(i)

Sections 268.2 and 268.9 are being amended at this time by revising paragraphs 268.2(h) and 268.9(d)(2)(i). These amendments were part of the Environmental Protection Agency's “Land Disposal Restrictions (LDR) Phase IV - Technical Corrections” final rule that was published in the Federal Register on May 11, 1999 (64 FR 25408-25417), but were inadvertently omitted from the revisions adopted by the Hazardous Waste Commission at its September 21, 1999 hearing. These amendments provide state equivalency with the federal regulatory requirements of 40 CFR § 268.2(h) and 40 CFR § 268.9(d)(2)(i).

Amendment of § 100.27(c)(6)

Section 100.27 is being amended at this time by revising paragraph (c)(6). These amendments were part of the Environmental Protection Agency's “HWIR-Media” final rule that was published in the Federal Register on November 30, 1998 (63 FR 65874-65947), but were inadvertently omitted from the revisions adopted by the Hazardous Waste Commission at its November 16, 1999 hearing. These amendments provide state equivalency with the regulatory requirements of 40 CFR § 270.155.

40 CFR § 270.55 states that the notice the Director provides regarding an appeal of a RAP should include a statement that any interested person may file an amicus brief, and the briefing schedule. The proposed state rule does not include these statements, because under state law, the permit decision is appealed directly to court. Matters such as filing of amicus briefs and establishing briefing schedules are determined by the court under the rules of civil procedure. To assist persons who may wish to file amicus briefs, the Director will publish notice of the case name and number. For similar reasons, the state rule omits a state analog to 40 CFR § 270.155(b).

Section 100.514 of the state regulations is also being amended at this time to remind persons wishing to appeal RAP or other permit decisions that the appeal process is governed by the regulations and section 25-15-305, C.R.S., as well as by section 24-4-106, C.R.S.

Correction of Typographical Errors and Inadvertent Omissions

Section 268.49(c)(1)(i) and the F037 listing in the table at § 261.31(a) are also being revised at this time to correct typographical errors.

Statement of Basis and Purpose - Rulemaking Hearing of June 19, 2001

8.46 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 261, and 6 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Proposed Approval of Petition for Use of ASTM D 6450-99 for Flash Point Testing per 6 CCR 1007-3 Section 261.21(a)(1)

On February 23, 2001, Roche Colorado Corporation (RCC) submitted a petition requesting the addition of the Miniflash Continuously Closed Cup Tester (according to ASTM D 6450-99) as an approved method for flash point testing under 6 CCR 1007-3, Section 261.21(a)(1).

Section 261.21(a)(1) of the regulations references two specific test methods for determining the characteristic of ignitability: the Pensky-Martens Closed Cup Test (ASTM standard D-93-79 or D-93-80) and the Setaflash Closed Cup Tester (ASTM standard D-3278-78). The regulations also allow the use of an equivalent test method approved by the Department under the procedures set forth in § § 260.20 and 260.21 of the regulations. The Hazardous Waste Commission must officially approve any test method as equivalent before it can be used when the regulations require use of a specific test method.

Based on an evaluation of the information and comparative data submitted by Roche Colorado Corporation, the Commission has concluded that Roche's petition meets the regulatory requirements of 6 CCR 1007-3, Section 260.20 and Section 260.21 for petitioning to add an equivalent testing or analytical method, and that the proposed test method is equivalent to the existing methods in terms of its sensitivity, accuracy and precision. The Commission approves the petition to adopt the Miniflash Continuously Closed Cup Tester test method (ASTM Standard D 6450-99) as an approved method for flash point testing under 6 CCR 1007-3, Section 261.21(a)(1).

These amendments revise § 261.21(a)(l) of the regulations to include ASTM Standard D 6450-99 as an approved method for flash point testing. The test method is also incorporated by reference in § 260.11(a) of the regulations.

Amendment of § 6.04

Section 6.04 is being amended by revising paragraph (a) to reflect the annual Commission fees to be assessed for fiscal year 2001-2002.

Statement of Basis and Purpose - Rulemaking Hearing of June 19, 2001

8.46 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260 and 261 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Introduction

The CHWRs, 6 CCR 1007-3, Part 261, Subpart B allows chemicals or other materials that are solid wastes to be added to the hazardous waste listing if the chemical or material can be shown to meet any of the criteria listed in 6 CCR 1007-3, Section 261.11(a). Pursuant to 6 CCR 1007-3, Section 261.11(b), classes or types of solid waste may also be listed as hazardous waste if wastes within the class or type of waste are, typically or frequently hazardous under the definition of hazardous waste found in the Colorado Hazardous Waste Act. That is, a "hazardous waste" means a solid waste which may "cause or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness or poses a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed." C.R.S. § 25-15-101(6)(a).

When Sarin Agent is discarded as defined in 6 CCR 1007-3, Section 261.2(a)(2), the agent becomes a solid waste and meets at least one of the regulatory criteria set forth under 6 CCR 1007-3, Section 261.11(a). Accordingly, and for the reasons presented herein, Sarin Agent should be added as a P-listed hazardous waste. In addition, if Chemical Weapons, or Environmental Media, Debris, and Containers Contaminated through Contact with Waste Chemical Weapons containing Sarin or Mustard Agents are discarded as defined in 6 CCR 1007-3, Section 261.2(a)(2), they pose a substantial present and potential hazard to human health or the environment if they are improperly treated, stored, transported, disposed of, or otherwise managed. For this and other reasons presented herein, Waste Chemical Weapons, or Environmental Media, Debris, and Containers Contaminated through Contact with Waste Chemical Weapons should be added as K-listed hazardous wastes.

The Division has previously requested listing of similar chemical agents in the past. The Division submitted a proposal to the Hazardous Waste Commission to list Mustard Agents as acute hazardous (P listed) wastes in June, 1997. The Commission adopted these changes at the rulemaking hearing on August 19, 1997. At that time, with the possible exception of Basin A, and the Army Complex Trenches, it was believed that all munitions containing Sarin, at the Rocky Mountain Arsenal had been treated or transported out of the state by the Army. Therefore Mustard Agents were the only chemical agent proposed for listing at that time.

This rule is not intended to alter current procedures for determining when a munition becomes a waste.

Statement of Basis and Purpose

These amendments to the CHWRs are made pursuant to the authority granted to the Hazardous Waste Commission in C.R.S. § 25-15-302(2).

The Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division (the Division) is proposing several revisions to 6 CCR 1007-3, Parts 260 and 261. The proposed revisions provide for the following amendments to Part 261 of the CHWRs:

1) Addition of waste Sarin Agent to the list of hazardous waste in Section 261.33 "Discarded Commercial Chemical Products. Off-Specification Species. Container Residues, and Spill Residues Thereof" as P911

2) Addition of Waste Chemical Weapons and Environmental Media, Debris, and Containers Contaminated through Contact with Waste Chemical Weapons to the list of hazardous waste in Section 261.32 - "Hazardous Waste from Specific Sources" as K901 and K902 - Military Munitions

3) Addition of Sarin Agent to Appendix VIII "Hazardous Constituents"; and,

4) Addition of Sarin, Mustard Agent (Mustard Gas, H, and HD), and Mustard HT (or Mustard T) to Appendix VII - "Basis of Listing Hazardous Waste" (for proposed K901 and K902 listings).

The proposed revision also provides for the addition of a definition for Chemical Weapon as "agent or munition that, through its chemical properties, produces lethal or other damaging effects on human beings, except that such term does not include riot control agents, chemical herbicides, smoke and other obscuration materials" to Section 260.10 of the CHWRs.

The regulatory criteria for listing a hazardous waste or listing classes or types of solid waste can be found in 6 CCR 1007-3, Section 261.11. In summary a solid waste can be listed as a hazardous waste if it meets any one of three (3) criteria: first, if the solid waste exhibits any characteristic of a hazardous waste; second if a solid waste presents or is suspected to present certain acute human health hazards; and third, if it is capable of posing a substantial present or potential hazard to human health or the environment when improperly managed. The second criterion applies to Acute Hazardous Waste, as the Division has proposed for the Sarin Agent, Waste Chemical Weapons, and Environmental Media, Debris, and Containers Contaminated through Contact with Waste Chemical Weapons.

Currently, the only facilities in Colorado known to have material affected by these hazardous waste listings are the Pueblo Chemical Depot (PCD) and the Rocky Mountain Arsenal (RMA). Both facilities are owned and operated by the United States Army (the Army). PCD has an inventory of 780,078 munition rounds containing over 2600 tons of Mustard Agent representing almost 10% of the nation's chemical weapons stockpile. The inventory is in the form of 105mm and 155mm projectiles, and 4.2 inch mortar rounds.

The RMA served as a manufacturing facility for chemical agent munitions during WWII and subsequent wars. A site-wide clean up at RMA is currently underway which involves the characterization and remediation of areas at the facility where wastes from the production of chemical weapons may have been disposed. The potential to locate and manage chemical weapons containing Sarin in Colorado is evidenced by the discovery of six Sarin Agent filled bomblets last fall at RMA.

In addition to these two facilities, munitions have also been discovered recently at the former Lowry Bombing and Gunnery Range (LBGR). These devices have all been determined to be simulant filled test bombs. However, due to incomplete knowledge of Department of Defense's use of the former LBGR to test chemical munitions, the Division cannot rule out the possibility that chemical agent may be located at this former military training site as well.

The Army has been pursuing the destruction of chemical weapons at both PCD and RMA. Mustard Agent destruction at PCD will involve the treatment of the Mustard Agent by incineration or an alternative technology. Future destruction of Sarin Bomblets at RMA will utilize the Army's Explosive Destruction System or other technology that is demonstrated to meet requirements for safety and effectiveness.

The P-listing proposed herein would apply to Sarin Agent that has been declared a waste as a discarded chemical product; Sarin Agent that has been declared to be off-specification; and Sarin Agent spill residues and container residues, all of which are solid wastes.

The K-listings proposed herein would apply to Chemical Weapons that have been declared a waste and Environmental Media, Debris, and Containers Contaminated through Contact with Waste Chemical Weapons which contain Sarin or Mustard Agents.

Overview of Chemical Weapons Sarin Agent (isopropylmethylphosphonofluoridate or GB) and Mustard Agent

In the past, international agreements such as that arising from the 1972 Biological and Toxin Weapons Convention focused on the destruction of biological and toxin weapons that were manufactured and stockpiled as a result of their production during wartime. These agreements have left nations with the formidable task of treating and disposing of these lethal weapons.

The Chemical Weapons Convention (CWC), the most recent of such agreements sought to clarify both the definition of Chemical Weapons and the prohibitions on the development, production, acquisition, stockpiling, destruction, and use of chemical weapons. Article II of the CWC defines chemical weapons in three parts. First, chemical weapons are “identified as all toxic chemicals and their precursors, except those intended for purposes allowed by the CWC,” second as “munitions and devices specifically designed to release these toxic chemicals,” and third as “any equipment specifically designed for use with such munitions or devices.” (OPCW Fact Sheet 2, 2001).

The Division's proposal to list chemical weapons as hazardous waste requires that a regulatory definition of chemical weapons also be proposed to Section 260.10 of the CHWRs to clearly define the K-waste listing. The proposed definition closely follows the definition for “chemical agent and munition” found in 50 USC 1521(j) which is used by both the U.S. Environmental Protection Agency and the Department of Defense. In proposing this regulatory definition the Division reviewed the comprehensive definition provided by the CWC to ensure that the definition “does not unnecessarily hinder the legitimate use of chemicals and the economic and technological development to which such uses may lead” (OPCW Fact Sheet 4, 2001). The Division believes that the proposed definition for chemical weapons is consistent with that provided by the CWC.

Sarin, a CWC Schedule I chemical agent, has been developed, produced, and stockpiled as a chemical weapon which possesses a lethal or incapacitating toxicity (State Department, 2001). Sarin, or GB actually refers to the synthetic chemical compound 0-isopropyl methylphosphonofluoridate. Sarin is a lethal nerve agent developed by the Germans during World War II. Sarin was subsequently adopted by the U.S. armed forces and manufactured, tested, and loaded in munitions that were stockpiled. The RMA in Colorado is one such facility that was involved with the testing and manufacturing of Sarin as a chemical weapon.

Designed to attack victims primarily through the inhalation pathway, Sarin is a volatile substance with a high vapor pressure at ordinary atmospheric temperature and pressure. As a chemical weapon, Sarin is containerized under pressure, where it persists as a liquid. Once released through mechanical dispersion or other means, Sarin rapidly volatilizes into the atmosphere where it is mainly taken up through the respiratory organs of its victims. Exposure to even minute concentrations of Sarin can result in incapacitation or immediate death.

Sarin is not used in the United States, except under laboratory or research scale settings. Because Sarin does not occur naturally, there is not a background level of Sarin in the soil, air, water, or food. The only known quantities of Sarin are under the control of the Army. While accidental releases of Sarin and Sarin-contaminated wastes that are managed at Army facilities could adversely impact public health, workers at these facilities are at a greater risk of exposure than the general population.

If accidentally released to the environment, Sarin is not expected to persist for relatively long periods of time. If released to water, Sarin will degrade through aqueous hydrolysis which is pH dependent (Tomes HSDB, 2001). The hydrolytic half-life of GB is highest in the pH range of 4-6, about 160 hours at pH5 and 25 degrees C, decreasing outside that range in either more alkaline or more acidic solutions (Clark, 1989). If released to the atmosphere, Sarin will exist in the vapor-phase where it will be degraded rapidly by reaction with photochemically produced hydroxyl radicals (estimated half-life of 10 hours) (Tomes HSDB, 2001). If released to soil, Sarin will degrade through hydrolysis (in moist soils) and evaporate from the soil surfaces as it evaporates at relatively the same rate as water.

Meteorological conditions such as temperature and winds enable rapid dispersion of Sarin into the atmosphere. Thus while the ability of Sarin to persist in the environment is low, the extremely high toxicity and relatively high volatility of Sarin make it a lethal chemical agent. In addition, certain toxic chemicals can be formed from Sarin through treatment, synthesis or environmental degradation. Some of these chemicals include methylphosphonic acid, isopropyl methylphosphonic acid, and diisopropyl methylphosphonate (DIMP).

As stated previously, Mustard Agents have already been added as P-listed hazardous wastes in the CHWRs. The following is provided for reference.

The term “mustard” can refer to several chemicals, but most commonly it refers to 2,2-di(chloro-ethyl)sulfide, or sulfur mustard. Mustard Agent is a synthetic organic compound that was first manufactured in 1822. The compound is stored as liquid and has a low vapor pressure at ordinary atmospheric temperature and pressures. As such, it evaporates into a gas very slowly under normal conditions. It was manufactured to be used in chemical warfare and was used as early as World War I and as recently as 1984-1988 during the Iran-Iraq war. During wartime, a Mustard warhead explodes on impact, vaporizing and spreading the contained agent in an area of enemy troops. As explained later, its effects during wartime are designed to be debilitating, if not fatal, via inhalation and dermal contact.

Mustard Agent is not used in the United States, except in laboratory settings. It does not occur naturally, and therefore, there are no natural background levels in the soil, air, water, or food. The known stockpile of Mustard Agent in the United States is under the control of the U.S. Army. While accidental releases of Mustard Agent and Mustard Agent wastes that are managed at Army facilities could adversely impact public health, workers at these facilities are more likely to be exposed than the general population.

If it is accidentally released, Mustard Agent in soil and under water may persist for up to 30 years. There is very little information on the transformation and degradation of Mustard Agent in the soil. Meteorological conditions such as temperature, humidity, and wind greatly affect persistence; with warmer temperatures and stronger winds, persistence decreases. The long residence time of Mustard Agent in soil and under water is thought to be due to the formation of a sulfonium-salt layer or a polymerized mustard-type compound that may insulate the agent.

Mustard Agent is very insoluble in water, but once dissolved, it rapidly hydrolyzes to thiodiglycol. Hydrolysis is primarily through reaction with surface water bodies rather than moisture in air. The half-life of Mustard Agent in a dissolved state is estimated to be 55 minutes at 10° C and 4 minutes at 25° C. Certain degradation products of Mustard Agent formed in the environment are toxic. Some of the degradation products include hydrochloric acid, ethylene, ethylene dichloride, 2, 2-dichlorodiethyl disulfide, vinyl chloride, hydrogen sulfide, and oxathione.

Health Effects of Sarin and Mustard Agents

Sarin is an extremely toxic compound which has a very rapid effect on humans and animals. As discussed, Sarin enters the body primarily through the inhalation route, although it may also be “readily absorbed by the intact skin” (Tomes HSDB, 2001), or through the eyes or mucous membranes. Symptoms from absorption through the skin appear more slowly than from respiratory or ocular exposures (Army Vol. 2, pg. 4, 1999). “Once in the blood stream, Sarin exerts its effects through the inhibition of the enzyme acetylcholinesterase (AchE), which is required for nerve and muscle function” (Army Vol. 2, pg. 3, 1999). “AchE inhibition adversely affects skeletal muscle, parasympathetic end organ, and central nervous system operation” (Army Vol. 2, pg. 3, 1999).

Toxicological effects of exposure to Sarin depend on the dose, and both the route and duration of exposure. “Doses of Sarin which are potentially life-threatening may be only slightly larger than those producing least effects” (Army MSDS, 1999). The symptoms normally associated with Sarin exposure can also be different based on the route of entry. For example, if exposure to the agent occurs through the eyes, pupils may become pinpointed, and vision dimmed as a result of the reduced amount of light entering the eyes. If exposure to the agent occurs through the skin, the eye pupils may be normal.

Individuals poisoned by sufficient amounts of GB may show the following signs and symptoms soon after exposure: difficulty in breathing; tightness of chest; dimness of vision and pinpointing of the eye pupils; drooling and excessive sweating; nausea, vomiting; cramps and loss of bladder/bowel control; twitching, jerking, and staggering; and headache, confusion, drowsiness, coma, and convulsion; and death (Army Vol. 2, pg. 3 and 4, 1999).

Given the high toxicity of Sarin, limits for occupational exposure, i.e. workers without respiratory protection, have also been estimated. A level of .0001 milligrams per cubic meter (averaged over an eight hour work day) is estimated as the maximum allowable worker occupational concentration of Sarin. Other experiments on the toxicity of Sarin indicate that if a person breathed a concentration of 1 mg of Sarin per cubic meter of air for one minute, he or she could develop myosis, the first noticeable effect of a low dose of Sarin (pinpointing of the pupil in the eye) (Sarin Fact Sheet, 2000).

Numerous data is available on the toxicological effects of Sarin on both humans and animals. These data indicate that Sarin clearly meets the criteria listed in 6 CCR 1007-3, Section 261.11(a)(2). That is Sarin has been found to be fatal to humans in low doses or is otherwise capable of causing or significantly contributing to an increase in serious irreversible, or incapacitating reversible, illness.

Mustard Agent is a highly toxic compound and vesicant (blistering agent). It is known to be lethal from primary and secondary effects. However, the existing data on health effects for inhalation, oral, and dermal exposure of humans and animals to Mustard Agent are limited. Sufficient information is available from human exposure data to identify the skin and respiratory passages as target organs to acute, subchronic, and chronic exposures to this chemical warfare agent.

Inhalation: The estimated lethal concentration for Mustard Agent in humans via inhalation exposure is 50 mg/m3 for 30 minutes. If inhaled even at lower concentrations, its effects cause bronchitis, and blistering in the lungs. Long-term respiratory disease may result from even low-dose exposures. Repeated exposure can result in hypersensitivity to its effects.

Dermal Contact: Mustard Agent burns skin and causes blisters within a short time of exposure. Parts of the body that are moist are more likely to be harmed and it can easily pass through normal clothing to get on the skin. Agent exposure causes eye burning and eyelid swelling. The subcutaneous LD50 in rat is 2 mg/kg. The LD50 for Mustard Agent applied to rat skin was reported as 9-12 mg/kg. The dermal LD50 for Mustard Agent on rabbit skin was 40-100 mg/kg.

General: Ingestion of Mustard Agent results in necrosis and epigastric distress. Systemic absorption results in injury to the bone marrow, lymph nodes, and spleen producing leukopenia and thrombocytopenia. Mustard Agent is able to alkylate DNA, RNA, and proteins, and as a result, it can affect a variety of cell functions. This includes causing cell death by inhibition of DNA repair and replication, altering proteins that have been coded by alkylated RNA, structurally altering cell membranes, or otherwise altering cell proteins.

A mutagen and a carcinogen, Mustard Agent penetrates deep within tissue, resulting in destruction and damage at some depth from the point of contact. The actions of Mustard Agent resemble those produced by ionizing radiation and, therefore, Mustard Agents are often referred to as radiomimetic compounds. Penetration is rapid, so that efforts to remove the toxic agent from the exposed area are ineffective after 30 minutes. Only very limited data are available to assess the toxicokinetic properties of Mustard Agent. Mustard Agent changes into other chemicals (e.g., thiodiglycol and conjugates, sulfone products, and glutathione conjugates) in the body and these chemicals are excreted in the urine within a few weeks. Though a demonstrated teratogen in animals, it is not known whether Mustard Agent can cause birth defects or affect reproduction in humans. The estimated bioconcentration factor ranges from 7-15.

Regulatory Evaluation

The regulatory criteria for listing a solid waste as a hazardous waste can be found in 6 CCR 1007-3, Section 261.11. As explained previously, this proposed listing applies to Sarin Agent, Chemical Weapons containing Mustard Agent (H, HD, T, and HT forms) or Sarin Agent, and Environmental Media, Debris, and Containers Contaminated through Contact with Waste Chemical Weapons that have been determined to be waste. Therefore, it applies to Sarin Agent, Chemical weapons, and Environmental Media, Debris, and Containers Contaminated through Contact with Waste Chemical Weapons that are solid wastes.

Solid waste that has been found to be fatal to humans in low doses, or in the absence of data on human toxicity, has been shown in studies to have certain specific levels of toxicity in animals, may be listed as hazardous waste by the Division. As discussed in Sections 4.1 and 4.2 above, Sarin Agent, by its inherent design as a lethal chemical agent, is fatal to humans in low doses. Numerous toxicological data and other information are readily available to establish that Sarin is fatal to humans in low doses. Pursuant to the CHWRs, materials exhibiting these criteria will be designated as Acute Hazardous Wastes.

Chemical weapons containing Sarin or Mustard Agent, are designed to pose similar hazards to human health and the environment, as do the pure chemical agents. These hazards are due both to the presence and demonstrated high toxicity of the chemical agents themselves. The Division is seeking the addition of Waste Chemical Weapons as a general class of hazardous waste because the weapons themselves, i.e. the shell casings and other material composing the “chemical weapon”, are contaminated with the chemical agent In addition, any Environmental Media, Debris, and Containers which are solid wastes that have been generated as a result of the treatment, storage, or disposal of Chemical Weapons, frequently or typically pose a hazard to human health because these materials can also be contaminated with the chemical agent contained in the weapon. Accordingly, Waste Chemical Weapons and Environmental Media, Debris, and Containers Contaminated through Contact with Waste Chemical Weapons “pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.” C.R.S. § 25-15-101(6)(a).

The Division believes that shell casings, munitions, devices, and other equipment used to contain, and release chemical agents as part of a Waste Chemical Weapon can be assumed to be contaminated with chemical agent as these components are often in direct contact with the chemical agent. While it may be true that some of the components of a Waste Chemical Weapon may not be in direct contact with the chemical agent itself, the Division believes that the potential for these components to become contaminated with the chemical agent as a result of the agent leaking out is a realistic concern. Additionally, removal of aged chemical agent which has gelled or polymerized inside the weapon casing, has proven to require extraordinary measures to decontaminate. Components that are removed from a Waste Chemical Weapon and that can be demonstrated to not be contaminated by chemical agent need not be managed as Waste Chemical Weapons. Also, chemical weapons that undergoe baseline reconfiguration before they become wastes do not meet the listing description for Waste Chemical Weapons.

The Division also believes that Environmental Media, Debris, and Containers which are solid wastes generated as a result of the treatment, storage, or disposal of Waste Chemical Weapons frequently or typically pose a hazard to human health because these materials can also be contaminated with the chemical agent contained in the weapon. In fact, the “Army generates a number of secondary waste streams, primarily from treatment of wastes to remove or destroy chemical agent, that may contain minute amounts of the agents or associated compounds.” (Army Vol. 1, pg.40, 1999).

In order to assure that these secondary wastes are handled and disposed of appropriately, the Division is proposing the addition of Waste Chemical Weapons and Environmental Media, Debris, and Containers Contaminated through Contact with Waste Chemical Weapons to the hazardous waste listings. Wastes that meet this listing description (K902) would not carry the listing code for Waste Chemical Weapons (K901) which might otherwise be applied to these wastes based on the mixture and derived from rules. The Army appears to agree with this contention. For example, the Army has proposed to list the following wastes as K-hazardous wastes in Utah: spent chemical neutralization solutions used to neutralize chemical agents, miscellaneous solids such as glass, metal, and wood contaminated with chemical agents, spent laboratory or monitoring and testing materials such as rags, wipes, gloves, aprons, and ppe contaminated with chemical agent, antifreeze, hydraulic fluid and refrigerants contaminated with chemical agents, spent carbon from air filtration equipment contaminated with chemical agent, ash, cyclone residue, baghouse dust, slag and refractory contaminated with chemical agent, and brine salts, liquids, solids and sludges generated from pollution abatement systems designed for treatment of chemical agents. The Army contends that these “waste streams are all proposed to be listed because they typically or frequently contain (or at one time contained) toxic constituents - specifically one or more of the chemical agents…” (Army Vol. 1, pg. 69, 1999).

Based on the above regulatory evaluation, Waste Chemical Weapons and Environmental Media, Debris, and Containers Contaminated through Contact with Waste Chemical Weapons meet: the necessary criteria presented in Section 261.11(b) of the CHWRs for listing as a class of hazardous waste. In addition, waste Sarin Agent meets the necessary criteria presented in Section 261.11(a) of the CHWRs for listing as an acute hazardous waste. Therefore, the Division proposes that Waste Chemical Weapons and Environmental Media, Debris, and Containers Contaminated through Contact with Waste Chemical Weapons and Sarin Agent be added to the K-listed and P-listed wastes found in Sections 261.32 and 261.33 of the CHWRs respectively. The Division specifically proposes to add waste codes K901 for Waste Chemical Weapons, K902 for Environmental Media, Debris, and Containers Contaminated through Contact with Waste Chemical Weapons, and P911 for Sarin Agent (CAS #107-44-8).

Sarin, Mustard Agent (Mustard Gas, H, and HD), and Mustard HT agents are also proposed for addition into Appendices VII and VIII of Part 261 of the CHWRs to identify the specific chemicals which form the basis for the K-listings. As previously stated, Mustard Agents are already P-listed hazardous wastes in the CHWRs. Addition of Sarin and Mustard Agents to Appendix VII identifies the specific chemical agents that pose the acute health hazard (basis for listing) in the proposed listings.

Benefits of Listing Sarin Agent Waste Chemical Weapons, and Environmental Media, Debris, and Containers Contaminated through Contact with Waste Chemical Weapons as Hazardous Waste

The principal benefits of listing Sarin Agent, Waste Chemical Weapons, and Environmental Media, Debris, and Containers Contaminated through Contact with Waste Chemical Weapons as hazardous wastes include the following:

1) The State will have an increased regulatory framework for management of waste Sarin Agent, Waste Chemical Weapons containing Sarin or Mustard Agents, and any Environmental Media, Debris, and Containers Contaminated through Contact with Waste Chemical Weapons which contain concentrations of the chemical agents. Approving the proposed listing will require more complete and appropriate treatment, as well as adequate record keeping and management of current and future inventories of these waste streams under the CHWRs.

The Division believes these proposed listings are appropriate given the extreme toxicity of the chemical agents and the potential for solid waste generated during management of chemical weapons to be contaminated with chemical agents. The Department will have additional accountability from the Army thereby ensuring protection of human health and the environment during management of waste Sarin Agent, Waste Chemical Weapons, or Environmental Media, Debris, and Containers Contaminated through Contact with Waste Chemical Weapons. Management of these wastes will include the time during interim management (the time between disposal and treatment) of the wastes, during treatment and destruction of the wastes, and throughout disposal of the wastes.

2) There will be an increase in the regulatory guidelines and enforcement accountability for the treatment and management of associated waste streams including munition parts, personnel protective equipment (PPE), dunnage, etc. If the proposed listings are approved, agent-containing wastes would carry the listings until they are either delisted, fully treated or decontaminated, or properly disposed of. These associated waste streams, resulting from the demilitarization process, are large in volume, and could potentially have significant impacts on human health and the environment if improperly managed.

3) Under the proposed listings, any spills (to soil or otherwise) or other impacts to environmental media would require cleanup and disposition as listed wastes under the “mixture rule.” The mixture rule provides that material mixed with a listed hazardous waste become a hazardous waste. This provision helps ensure that waste quantities are minimized, and ensures the protection of public health and the environment through proper management of these contaminated wastes.

4) The listings will require the Army to consider waste management planning as a factor in the Chemical Demilitarization Process which will be chosen for the Mustard Agent rounds stored at the Pueblo Chemical Depot. All listed waste streams must be managed adequately to protect public health and the environment. In addition, the planning process may result in the minimization of waste generation in the demilitarization process.

5) Colorado does not currently possess the regulatory framework for these types of waste streams, and based on the problem of treating and disposing of these wastes nation wide, the potential exists for these types of wastes or other chemical agent wastes to come to Colorado for treatment or disposal in the future. These proposed listings comprise the Division's initial step in building a regulatory framework for these waste streams. The listings, and other amendments that the Division may propose to the Commission in the future will assure that waste streams containing chemical agent, regardless of their origin, will be handled adequately and appropriately in a manner that is protective of human health and the environment in Colorado.

The anticipated costs to the Army related to the impact of these proposed listings are minimal when compared to the overall cost of treatment and destruction of Chemical Agents and the decommissioning and disposal of chemical weapon stockpiles. Many of the costs to manage these wastes streams are already required to ensure worker safety.

Summary of Other States Listings for Chemical Agent Wastes

There are several other states, in addition to Johnston Island, where chemical agents are currently stored as part of the chemical weapons stockpile. In addition to Colorado, many other states have listed Mustard Agent as hazardous wastes. Many of these states also possess hazardous waste listings for other chemical agents. Each listing is slightly different, as described below:

Oregon	Listed HD and HT as P998 (blister agents). Principal justification was to ensure adequate regulatory control over Mustard Agents that are destined for disposal and to deal with spill response and cleanups. Nerve agents are listed as P999 which includes GB (Sarin) and VX. Oregon has recently listed all munitions awaiting chemdemil treatment as hazardous waste, and also F-listed treatment residues from demilitarization.
Utah	Originally listed Chemical Agents as P999 and F999. Utah is continuing to rework their listing. Anticipated changes include the addition of several K-listings.
Indiana	Nerve agent is listed in Indiana Hazardous Waste Management rules as 1001.
Kentucky	Chemical agents listed in Kentucky Hazardous Waste Management Rules as N003. Listing includes mustard and nerve agents.
Maryland	Mustard HD and Mustard T Listed in Code of Maryland Regulations as K997 and K998 respectively.

Commission Finding & Opinion

The Commission finds, based upon substantial evidence in the record, that adoption of these rules is necessary to protect the public health and the environment of the state. The Commission has reviewed the information in the statement of basis and purpose, and has considered the testimony provided at the hearing. The Commission finds the evidence in this record that waste Sarin Agent, waste Chemical Weapons, and Environmental Media, Debris, and Containers Contaminated through Contact with Waste Chemical Weapons pose a substantial present and potential hazard to human health and the environment if they are improperly treated, stored, transported, disposed of, or otherwise managed to be highly credible and persuasive. Much of this information was developed by the United States, which is the primary entity that will be affected by adoption of this regulation.

Statement of Basis and Purpose - Rulemaking Hearing of November 20, 2001

8.47 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 261 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Conformance with the vacatur regarding secondary materials reclaimed by the mineral processing industry.

Section 261.2(c)(3) of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) is being amended at this time to conform with the federal appeals court ruling in *Association of Battery Recyclers, Inc. et al. v. U.S. EPA et al.*, 208 F. 3d 1047 (D.C. Cir. 2000, Docket Number: 98-1368) regarding several consolidated challenges to the Phase IV land disposal restrictions (LDR) rule promulgated by the Environmental Protection Agency (EPA) on May 26,1998 (63 FR 28556-28753). The challenges to the LDR Phase IV rule were filed by the National Mining Association, the American Iron and Steel Institute, the Chemical Manufacturers Association, and other industry groups.

In the Phase IV rule, EPA revised the reclamation provision in 40 CFR § 261.2(c)(3) by adding the limiting statement **"(except as provided under 40 CFR 261.4(a)(17))."** State analogs to the federal rule were adopted by the Colorado Hazardous Waste Commission (Commission) on September 21, 1999.

In the April 21, 2000 ruling, the court found that EPA had overstepped its authority when it regulated in-process reclaimed mineral processing secondary materials. As a result, the provision "(except as provided under 40 CFR 261.4(a)(17))" in 40 CFR § 261.2(c)(3) was set aside. A copy of the decision can be found at http://www.ll.Georgetown.edu/Fed-Ct/Circuit/dc/opinions/98-1386a.pdf.

The court's mandated deletion of the above referenced provision in 40 CFR § 261.2(c)(3) relates solely to characteristic sludges and by-products as well as certain listed commercial chemical products. The court did not strike any other provision of the LDR Phase IV regulations. As such, the outcome of the April 2000 decision is that (1) characteristic sludges and by-products are now regulated by the pre-LDR Phase IV regulatory approach of 40 CFR § 261.2(c)(3) (i.e., not regulated as "solid waste" if reclaimed) and (2) spent materials continue to be subject of the LDR Phase IV regulations, which require such materials to be subject to RCRA Subtitle C requirements unless the conditional exclusion of 40 CFR § 261.4(a)(17) is satisfied.

At this time, the Commission is amending § 261.2(c)(3) of the state hazardous waste regulations to be consistent with the court's decision in *Association of Battery Recyclers, Inc. v. US EPA*, 208 F. 3d 1047 (D.C. Cir. 2000). This amendment to the regulations also provides consistency with § 25-15-302(4)(b) of the Colorado Revised Statutes (C.R.S.), which mandates that Colorado's mining and mineral processing regulations can not be more stringent than the federal program.

Statement of Basis and Purpose - Rulemaking Hearing of November 20, 2001

8.47 Basis and Purpose

These amendments to 6 CCR 1007-3, Part 261 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of Part 261 Appendix IX to Conditionally Delist F006 Hazardous Waste Generated by the Chemical Etching Process at the Wright & McGill Company located at 4245 East 46th Avenue in Denver. Colorado 80216

Appendix IX of Part 261 is being amended at this time to conditionally delist F006 hazardous waste generated by the chemical etching process at the Wright and McGill Company in Denver, Colorado. This delisting will allow the Wright and McGill Company to dispose of the waste generated from this process at a solid waste landfill that meets the requirements of the Colorado Solid Waste Regulations 6 CCR 1007-2, provided it complies with the conditions of the delisting.

On November 20, 2001, The Hazardous Waste Commission ("Commission") tentatively approved Wright & McGill's petition to delist F006 hazardous waste generated by the chemical etching process at the Wright & McGill Company located at 4245 East 46th Avenue in Denver, Colorado 80216. Pursuant to the provisions of § 25-15-302(2), C.R.S. and 6 CCR 1007-3, § 260.20(c), a public notice of the tentative decision to approve the delisting was published in the Colorado Register for written public comment. The public comment period closed on January 10, 2002. No comments were received. The tentative decision becomes the final decision as of February 25, 2002, and the delisting will become effective 20 days after publication in the Code of Colorado Regulations ("CCR") at 6 CCR 1007-3.

The Wright and McGill Company operates a manufacturing facility in Denver, Colorado for the production of fishhooks. One of the metal finishing operations conducted by the company is chemical etching. Wastewater that is generated from this operation is treated on-site to remove heavy metals and generates a wastewater treatment sludge that is classified as a F006 listed hazardous waste. The F006 hazardous waste listing in § 261.31 describes wastewater treatment sludge that is generated from electroplating operations. Electroplating has been defined by the EPA to include chemical etching.

The basis for each hazardous waste listing is described in Appendix VII of Part 261. Each listing is based on hazardous constituents that are generally contained in wastes described by the listing. The hazardous constituents that formed the basis for the F006 listing include hexavalent chromium, nickel, and cyanide (complexed).

Wastewater from the chemical etching process is transferred to the wastewater treatment unit for treatment. The wastewater enters the west treatment tank for metal precipitation using sodium hydrosulfide, anionic polymer, and sodium hydroxide. Following the treatment process, the liquid is decanted and the sludge is conveyed to a microfiltration system. The microfilters have an absolute filtration size of 10.0 microns. The sludge is then pumped through a filter press forming the F006 sludge.

Analytical sampling of the F006 sludge was conducted prior to the submittal of the delisting petition. The chemical etching process does not significantly change on a day-to-day basis, and the collected samples adequately represented the waste in question. The Hazardous Materials and Waste Management Division at the Colorado Department of Public Health and Environment (the Division), evaluated the sampling results and the request for petitioning of the waste in accordance with § 260.22. This evaluation was provided to the Commission.

The results of the waste sampling indicate that the waste did not contain detectable concentrations of hexavalent chromium or complexed cyanide. The results of the analysis did indicate that the waste contained detectable concentrations of cadmium and nickel. However, based on health-based risk assessment calculations derived using the general assumptions outlined in the Division's current risk assessment policy, the waste did not contain concentrations of these constituents at levels which would be considered harmful to human health or the environment.

Analytical sampling of the waste also indicated that the waste contained detectable concentrations of barium, trivalent chromium, and lead. Based on health based risk assessment calculations and average background soil conditions, the Division determined that the waste did not contain concentrations of those metals at levels which would be considered harmful to human health or the environment.

The potential for constituents in the waste to leach out and contaminate groundwater was evaluated by the Division using TCLP analytical tests that measure the maximum potential for constituents to be released from the waste. The results of the TCLP analysis indicated that arsenic, cadmium, hexavalent chromium, lead, mercury, selenium, and silver do not show any chemical potential to leach out of the waste. Additionally, barium and nickel showed only a small potential for those metals to leach from the waste. However, the Wright and McGill Company has indicated that all delisted sludge would be disposed in a solid waste landfill. Disposal in a solid waste landfill would ensure protection of human health and the environment from any metals contained in leachate that might migrate from the waste. Further, the results of the waste sampling indicated that the waste sludge does not contain any organic constituents. Consideration of the potential health effects caused by exposure to organic constituents was therefore not considered in evaluating the petition by the Division.

This delisting is being granted under conditions that specify disposal, record keeping, and storage requirements for the delisted sludge. Conditional delisting of the waste also prohibits any major changes to the chemical etching or wastewater treatment process without prior notification, evaluation, and approval by the Division.

This delisting does not apply to waste that demonstrates a “significant change” as defined in Delisting #005 in Part 261, Appendix IX-Wastes Excluded Under § 260.20 and § 260.22(d), or if any of the conditions specified in Part 261, Appendix IX for this delisting are not met. Should either of these occur, the waste is and must be managed as a hazardous waste. While the Division has approved a conditional delisting for this specific waste at this specific site, the findings and criteria associated with the approval are unique. Other petitions for delisting, even if similar in material or use, will be reviewed by the Division on a case-by-case basis.

Statement of Basis and Purpose - Rulemaking Hearing of April 16, 2002

8.48 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 261, 266 and Part 6 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Revision of the Hazardous Waste Listings for Chemical Weapons and Mustard Agent

These amendments correct an error that currently exists in the military munitions listings (K901 and K902) and the Mustard Agent listing (P909). The error involves the omission of certain language from the listings. The language is necessary in order to clarify the appropriate waste code applicable to these wastes.

The amendments being adopted at this time include:

1) Adding a clarifying sentence to the P909 listing in § 261.33(e); and

2) Revising the K901 and K902 listings in § 261.32 to add a reference to the P909 listing.

The current military munitions waste code listings K901and K902, as described in § 261.32 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3), include residues resulting from treatment of hazardous waste with codes P910 and P911 and soil, water, debris or containers contaminated through contact with hazardous waste listed as P910 or P911. Accordingly, the P910 and P911 hazardous waste code listings exclude those same wastes that are listed under the K901 or K902 hazardous waste codes. The language in these listings is intended to prevent multiple waste codes from applying to the same waste. If this language was not included in these listings, wastes that carry either the K901 or K902 waste codes might also carry the P910 or P911 waste codes based on the mixture or derived from rules.

For the same reasons, the K901 and K902 waste code listings should have also included a reference to the P909 waste code listing. Moreover, the P909 hazardous waste code listing should have also excluded wastes similar to those in the P910 and P911 waste code listings.

These amendments to the K901, K902 listings in § 261.32 and the P909 listing in § 261.33(e) of the regulations correct this error and help to clarify the appropriate waste code that should be applied to these wastes.

Amendment of § 6.04

Section 6.04 is being amended by revising paragraph (b) to require that any entity or person required to pay an annual fee under § 6.04 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) shall pay that fee by September 15th of each year. The date is being changed to move these payments earlier into the state fiscal year. The previous due date for payment of this fee was November 15 of each year.

In addition, § 6.04 is being amended by revising paragraph (a) to reflect the annual Commission fees to be assessed for fiscal year 2002-2003.

Change of Official EPA Mailing Address

This amendment revises section 260.11(a)(11) to remove the phrase “OSW Methods Team, 401 M St., SW” and adds in its place “OSW Methods Team, 1200 Pennsylvania Ave., NW.” This amendment updates the official mailing address for EPA, due to the relocation of the majority of its Headquarters offices to downtown Washington, DC.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations that were published in the Federal Register at 66 FR 34374-34376, June 28, 2001.

Correction of Typographical Errors and Inadvertent Omissions

These amendments correct typographical errors and inadvertent omissions that exist in § § 261.33(e), 266.12(c), 266.13(a), 266.14(e)(9) and 266.14(g)(5) of the current regulations, and provide state equivalency with the applicable federal requirements.

Statement of Basis and Purpose - Rulemaking Hearing of July 16, 2002

8.49 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 261 and 268 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Conformance with the Vacatur of Organobromine Production Waste Listings

In a March 17, 2000 Federal Register (65 FR 14472-14475), the Environmental Protection Agency (EPA) amended its regulations to conform with an order issued on April 9,1999 by the United States Court of Appeals for the D.C. Circuit in Great Lakes Chemical Corporation v. EPA [Docket No. 98-1312] that vacated Agency regulations listing certain organobromine wastes as hazardous wastes under RCRA. Under the court's decision, and as reflected in the March 17, 2000 rule, the vacated federal hazardous waste listings and regulatory requirements based on those listings are to be as though they have never been in effect. State regulations, which may be more stringent than federal rules, were not necessarily affected by the court's ruling.

While the state has the authority to be more stringent than the federal program, this was not the intent of the Commission when originally promulgating state analogs to the federal regulations for organobromine production wastes on April 20, 1999. At this time, the Commission is adopting revisions to the state analogs to maintain consistency and provide equivalency with the amendments of the March 17, 2000 rule (65 FR 14472-14475).

The amendments being adopted at this time include the following revisions:

1) Revising the table at § 261.32 to remove the K140 entry in the “Organic Chemicals” subgroup;

2) Revising the table at § 261.33(f) to remove the U408 (2,4,6-Tribromophenol) entry;

3) Revising Appendix VII of Part 261 to remove the K140 entry;

4) Revising Appendix “VIII of Part 261 to remove the U408 (2,4,6-Tribromophenol) entry;

5) Removing § 268.33 (Waste-specific prohibitions - organobromine wastes);

6) Revising the table at § 268.40 to remove the K140 and U408 entries; and

7) Revising the table at § 268.48 to remove the 2,4,6-Tribromophenol entry.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations that were published in the Federal Register at 65 FR 14472-14475, March 17, 2000.

Chlorinated Aliphatics Listing and LDRs for Newly Identified Wastes

This rule adds two wastes (K174 and K175) generated by the chlorinated aliphatics industry to the list of hazardous wastes at § 261.32. Chlorinated aliphatic hydrocarbons chemicals (CAHCs) are a group of organic chemicals, most of which are colorless liquids at room temperature, primarily used as intermediate feedstocks for the production of polyvinyl chloride (PVC) plastics. CAHCs are also used directly in liquid form as various types of solvents, as intermediates for the production of other types of chemicals, and in assorted other commercial use categories.

This rule lists as hazardous waste two of six wastes generated by the chlorinated aliphatics industry. These two wastes are K174 - Wastewater treatment sludges from the production of ethylene dichloride or vinyl chloride monomer (EDC/VCM); and K175 - Wastewater treatment sludges from the production of vinyl chloride monomer using mercuric chloride catalyst in an acetylene-based process. The effect of listing these two wastes is to subject them to stringent management and treatment standards under RCRA and to subject them to emergency notification requirements for releases of hazardous substances to the environment.

This rule allows for a contingent-management listing approach for the K174 waste. Under this approach, wastes meeting the K174 description that are disposed in a licensed or permitted Subtitle C landfill or nonhazardous waste landfill will not be considered hazardous wastes. The conditional listing is based on the results of a risk assessment, from which EPA concluded that management of K174 wastes in a landfill poses no significant risks to human health or the environment. To qualify for the exemption, the wastes cannot be placed on the land prior to disposal and the generator must be able to demonstrate that the wastes were disposed in a landfill.

The amendments being adopted at this time provide state equivalency with the regulatory requirements of the EPA, and include the following revisions:

1) Revising the table at § 261.32 to add the K174 and K175 listings in the “Organic Chemicals” subgroup;

2) Revising Appendix VII of Part 261 to add the K174 and K175 listings;

3) Revising Appendix VIII of Part 261 to add entries for Octachlorodibenzo-p-dioxin (OCDD) and Octachiorodibenzofuran (OCDF);

4) Adding a new § 268.33 (Waste-specific prohibitions – chlorinated aliphatic wastes);

5) Revising the table at § 268.40 to add new entries to the F039 listing, adding the K174 and K175 listings, and adding footnote 12 to the table; and

6) Revising the table at § 268.48 to add the new regulated constituents and universal treatment standards under the organic constituents heading.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations that were published in the Federal Register at 65 FR 67068-67133, November 8, 2000.

Inorganic Chemical Manufacturing Wastes Identification and Listing

This rule adds three new wastes to the K-coded list of hazardous wastes regulated under § 261.32. The three inorganic chemical manufacturing wastes being added at this time are:

K176 - Baghouse filters from the production of antimony oxide, including filters from the production of intermediates (e.g., antimony metal or crude antimony oxide), (E);

K177 - Slag from the production of antimony oxide that is speculatively accumulated or disposed, including slag from the production of intermediates (e.g., antimony metal or crude antimony oxide), (T); and

K178 - Solids from manufacturing and manufacturing-site storage of ferric chloride from acids formed during the production of titanium dioxide using the chloride-ilmenite process. (T).

The effect of listing these wastes is to subject them to stringent management and treatment standards under RCRA AND to subject them to emergency notification requirements for releases of hazardous substances to the environment. These amendments add the toxic constituents found in these newly listed wastes to the list of constituents which forms the basis for classifying wastes as hazardous, and also sets land disposal restrictions prohibitions and treatment standards for these wastes in Part 268 of the regulations.

The amendments being adopted at this time provide state equivalency with the regulatory requirements of the EPA, and include the following revisions:

1) Revising paragraph (b)(15) of § 261.4 to broaden the exclusion for leachate or gas condensate collected from landfills;

2) Revising the table at § 261.32 to add the K176, K177 and K178 listings in the “Inorganic Chemicals” subgroup;

3) Revising Appendix VII of Part 261 to add the K176, K177 and K178 listings;

4) Adding § 268.36 (Waste-specific prohibitions - inorganic chemical wastes); and

5) Revising the table at § 268.40 to add entries and treatment standards for the K176, K177 and K178 listings.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations that were published in the Federal Register at 66 FR 58258-58300, November 20, 2001; and as amended at 67 FR 17119-17120, April 9, 2002.

Correction of Typographical Errors and Inadvertent Omissions

These amendments correct typographical errors and inadvertent omissions that exist in § 261.32, Part 261 Appendices VII and VIII, § 268.7, § 268.40, and Part 268, Appendices VII and VIII of the current regulations.

Statement of Basis and Purpose - Rulemaking Hearing of February 18, 2003

8.50 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 261, 262, 264, 265, 268 and 100 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendments to Hazardous Waste Fees

After three years under the present hazardous waste fee structure, the Department has determined that an increase in fees is necessary beginning in State Fiscal Year 2004, which begins on July 1, 2003. Legislation passed by the General Assembly in 2000 (SB 00-177) provided some general directives for implementation of the hazardous waste regulatory program, including guidance for future fee adjustments by the Hazardous Waste Commission.

The Department is authorized by U.S. EPA to operate the hazardous waste regulatory program in Colorado in lieu of the federal government. One of the key criteria evaluated by U.S. EPA in authorizing the state program is resources, both in terms of funding and in terms of qualified personnel. Without an increase in fee revenues, the Department has determined that it will not be able to operate an adequate program beginning in State Fiscal Year 2004.

The purpose of these amendments is to implement a balanced increase in hazardous waste program fees that the Department expects to provide adequate funding for the hazardous waste program for a period of approximately three years. This fee structure is expected to result in annual fees from TSD facilities that are approximately 29% of the Department's costs associated with TSD facilities, which complies with the 30% limit established by SB 00-177. Also, the annual fees from generator facilities is expected to be approximately 48% of the Department's costs associated with generators, which complies with the 50% limit established by SB 00-177. The adjusted fees are expected to increase the revenue from fees to the hazardous waste program by approximately 29% in state fiscal year 2004. When the funding provided by U.S. EPA is considered, the fee changes are expected to increase funds available to operate the hazardous waste program by approximately 16%.

In addition, these amendments incorporate the generator fees that were established by SB 00-177 into regulation.

The amendments being adopted at this time include the following:

a) Amendment of Part 260: Section 260.10 of Part 260 is being amended to add definitions of “Conditionally Exempt Small Quantity Generator” and “Large Quantity Generator”, and to amend the definition of “Small Quantity Generator.”

b) Amendment of Part 262: Part 262 is being amended to add a new section 262.13, which identifies the annual fees that generators are required to pay. The current generator annual fees established at 25-15-302(3.5), C.R.S. of $300 for an SQG and $1900 for an LQG are being increased by 30% to $390 and $2,470 respectively.

c) Amendment of Part 100: Part 100 is being amended to:

1) Increase TSD operating fee rates by 14 to 17%. (§ 100.31 Table)

2) Increase TSD operating minimum and maximum fees by 100%. (§ 100.31(b) and § 100.31 Table)

3) Change TSD post-closure fee from $2,500 per acre to $4,000 per unit (§ 100.31 Table)

4) TSD post-closure fee minimum is no longer relevant. Maximum fee increased by 20% to $12,000. (§100.31(b))

5) Create new annual fees for operation and post-closure of corrective action management units. (§ 100.31 Table)

6) Create new annual fee for facilities that utilize environmental use restrictions as a basis for corrective action decisions. This new fee is for those areas at a facility that are not already subject to post-closure fees. (§ 100.31 Table)

7) Increase the document review and activity fee by 15%, from $100 to $115. (§ 100.32(b))

8) Increase the ceiling fee for Class I permit modifications from $1,000 to $2,000. (§ 100.32(c)(1))

9) Reference a new section 262.13, which identifies the annual fees that generators are required to pay. (§ 100.31(a)(3))

Correction of Typographical Errors and Inadvertent Omissions

These amendments correct typographical errors and inadvertent omissions that exist in Parts 261, 264, 265, 268 and 100 of the current regulations.

Statement of Basis and Purpose - Rulemaking Hearing of June 17, 2003

8.51 Basis and Purpose.

These amendments to 6 CCR 1007-2, Part 3 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Inspection of Off-Site Hazardous Waste Disposal Sites

These amendments to 6 CCR 1007-2, Part 3 revise the inspection frequency for the Department's inspection of off-site hazardous waste disposal sites. As specified in Section 25-15-209.5, C.R.S., such inspection shall be conducted at intervals determined by rule and regulation of the commission based on the volume and toxicity of the wastes being received. The State's only hazardous waste disposal facility is the Clean Harbors Deer Trail LLC facility (formerly Highway 36 Land Development Company.) This facility, in a meeting on February 6, 2003 and in a letter of March 4, 2003, has notified the Department of its intent to significantly reduce its hazardous waste treatment and disposal activities for the near future.

The existing regulations require the Department to conduct inspections of off-site hazardous waste disposal sites a minimum of four (4) times per month. These amendments, which tie the Department's inspection frequency more closely to the volume of wastes received, replace the existing inspection frequency with the following inspection schedule: a minimum of once per month when waste receipts are less than 500 tons per month; a minimum of twice per month when waste receipts are between 500 tons and 1000 tons per month; and a minimum of four (4) times a month when waste receipts are greater than 1000 tons per month. The Department will continue to inspect the facility more frequently if the type of wastes received, the compliance history of the facility, or findings of previous inspections warrant a greater frequency.

Statement of Basis and Purpose - Rulemaking Hearing of June 17, 2003

8.51 Basis and Purpose

These amendments to 6 CCR 1007-3, Parts 261, 264, 265, 267, Part 100 and Part 6 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Zinc Fertilizers Made From Recycled Hazardous Secondary Materials

These amendments revise § § 261.4 and 267.20 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) to correspond to federal regulations promulgated by the Environmental Protection Agency and published in the Federal Register on July 24, 2002 (67 FR 48393-48415).

This rule puts in place a new, more coherent system for regulating the practice of manufacturing zinc fertilizers from hazardous secondary materials, and establishes conditions under which such materials can be recycled to produce fertilizers without the materials or the fertilizers being regulated as hazardous wastes.

The intent of these new regulations to create a more consistent and comprehensive regulatory framework for such recycling activities, will make industry more accountable for those activities, will establish more appropriate limits on contaminants in zinc fertilizers made from hazardous secondary materials, and in general will promote safe, beneficial recycling in the zinc fertilizer industry.

The amendments being adopted at this time include:

1) Revising § 267.20(b) to remove the exemption from land disposal restrictions (LDR) treatment standards for zinc fertilizers made from electric arc furnace dust, or K061;

2) Adding § 267.20(d) which excludes fertilizers that contain recyclable materials from being subject to RCRA regulation provided that:

   a. They are zinc fertilizers excluded from the definition of solid waste according to § 261.4(a)(21) of the regulations; or

   b. They meet the applicable treatment standards in Subpart D of Part 268 of the regulations for each hazardous waste they contain.

3) Adding § 261.4(a)(20) which establishes a conditional exclusion from the RCRA regulatory definition of solid waste for hazardous secondary materials that are legitimately recycled to make zinc micronutrient fertilizers; and

4) Adding § 261.4(a)(21) which establishes conditions (chiefly concentration limits for certain heavy metals and dioxins) under which zinc fertilizers produced from hazardous secondary materials are not classified as solid wastes, and hence are not subject to RCRA subtitle C regulation.

The conditional exclusion from the definition of solid waste for hazardous secondary materials used in zinc fertilizers is less stringent than existing state standards, and Colorado is not required to adopt these provisions. The elimination of the exemption from LDR treatment standards for K061 derived fertilizers is more stringent than existing state standards, and Colorado is required to adopt this provision. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 67 FR 48393-48415, July 24, 2002.

Removal of the Conditional Exemption for Certain Slag Residues

These amendments revise § 267.20 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) to correspond to federal regulations promulgated by the Environmental Protection Agency and published in the Federal Register on August 24, 1994 (59 FR 43496-43500).

Section § 267.20 is being amended at this time so that certain uses of slag residues produced from the high temperature metal recovery (HTMR) treatment of electric arc furnace dust (EPA Hazardous Waste No. K061), steel finishing pickle liquor (K062), and electroplating sludges (F006) are not exempt from RCRA Subtitle C regulations. Specifically, this rule adds a new paragraph (c) to § 267.20 which prohibits anti-skid/de-icing uses of HTMR slags derived from K061, K062, and F006 as waste-derived products placed on the land, unless there is compliance with all Subtitle C standards applicable to land disposal.

The elimination of the conditional exemption provision for certain slag residues is more stringent than existing state standards, and Colorado is required to adopt this provision. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 59 FR 43496-43500, August 24, 1994.

Mixture and Derived-From Rules Revision

These amendments revise § 261.3 of the Colorado Hazardous Waste Regulations (6 CCR 1007 3) to correspond to federal regulations promulgated by the Environmental Protection Agency and published in the Federal Register on May 16, 2001 (66 FR 27266-27297), and amended on October 3, 2001 (66 FR 50332-50334).

The amendments being adopted at this time include:

1) Removing and reserving § 261.3(a)(2)(iii);

2) Revising § 261.3(a)(2)(iv) and § 261.3(c)(2)(i) to include a reference to § 261.3(g); and

3) Adding paragraphs (g)(1) through (g)(4) to § 261.3.

Colorado is not adopting a state analog to the federal mixed waste exemption of 40 CFR § 261.3(h). Pursuant to 40 CFR § 261.3(h), mixed waste (i.e., wastes that are both hazardous and radioactive) are conditionally exempt from the mixture and derived-from rules, provided the mixed waste is handled in accordance with 40 CFR part 22, Subpart N. The regulation of mixed waste in Colorado will continue to be subject to the mixture and derived-from rules.

These amendments are less stringent than existing state standards, and Colorado is not required to adopt these provisions. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the applicable preamble language for the Environmental Protection Agency regulations that were published in the Federal Register at 66 FR 27266-27297, May 16, 2001; and as amended at 66 FR 50332-50334, October 3, 2001, for which state analogs are being adopted at this time.

Amendment of § 261.4(a)(17) and § 261.24(a)

These amendments revise § § 261.4 and 261.24 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) to correspond to federal regulations promulgated by the Environmental Protection Agency and published in the Federal Register on March 13, 2002 (67 FR 11251-11254).

These amendments revise § 261.4(a)(17) and § 261.24(a) of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) to provide state equivalency with the federal regulations promulgated by the Environmental Protection Agency and published in the Federal Register on March 13, 2002 (67 FR 11251-11254). The federal rule was promulgated in response to vacaturs ordered by the United States Court of Appeals for the District of Columbia Circuit in Association of Battery Recyclers, v. EPA 208 F.3d 1047 (2000).

The amendments being adopted at this time include:

1) Revising Section 261.4(a)(17) to replace the term “secondary materials” (which includes sludges and by-products, as well as spent materials) with the more narrow term “spent materials”. These changes inform the public that mineral processing characteristic sludges and by-products being reclaimed are not solid wastes, and mineral processing characteristic spent materials remain eligible for the conditional exclusion when being reclaimed.

2) Revising Section 261.24(a) to exempt manufactured gas plant (MGP) wastes from the Toxicity Characteristic regulation. As a result, the Toxicity Characteristic Leaching Procedure (TCLP) may not be used to determine whether MGP waste exhibits the characteristic of toxicity.

The Commission already adopted amendments to § 261.2(c)(3) of the state hazardous waste regulations at the time of its November 21, 2001 Rulemaking Hearing to be consistent with the court's decision. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 67 FR 11251-11254, March 13, 2002.

Amendment of § 6.04

Section 6.04 is being amended by revising paragraph (a) to reflect the annual Commission fees to be assessed for fiscal year 2003-2004.

Revision of Appendix I to § 100.63

Appendix I to § 100.63 is being revised to replace the current version with a reformatted version of the Appendix, and to correct typographical errors that exist in paragraphs C.4., C.6., C.7.a., C.7.b., C.8.a., F.2., F.4.a., F.4.b., and G.1. of the current version. Section L. of the appendix is also being revised as part of the rulemaking regarding “Amended Regulations for Burning Hazardous Waste in Incinerators, Boilers, and Industrial Furnaces”.

Amendment of § 265.193(i)

The wording of § 265.193(i) is being amended to revise the language of the state analog to correspond to the wording of the federal provision at 40 CFR § 265.193(i). Section 265.193(i) is being amended by revising paragraph (i)(2), deleting paragraph (i)(3), and renumbering paragraphs (i)(4) and (i)(5) as (i)(3) and (i)(4). These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency, and are being made in response to EPA comments regarding authorization of the State program.

Correction of Typographical Errors and Inadvertent Omissions

These amendments correct typographical errors and inadvertent omissions that exist in § § 264.1(j)(10), 264.554(b), 267.70(b)(3), 267.80, 100.21(d)(3)(ii)-(iii), 100.27(b)(3), 100.27(b)(4)(viii), 100.27(b)(5), 100.27(f)(1)(iv)(D), 100.31(b)(5)(ii), 100.41(b)(12)(v)(C) 100.61(a)(5), 100.61(c), 100.63(a)(1)(ii), 100.63(b)(2), 100.63(c)(2), and 100.63(e)(2)(iii) of the current regulations, and provide state equivalency with the applicable federal requirements.

Statement of Basis and Purpose - Rulemaking Hearing of June 17, 2003

8.51 Basis and Purpose

These amendments to 6 CCR 1007-3, Parts 260, 261, 264, 265, 267, and 100 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

AMENDED REGULATIONS FOR BURNING HAZARDOUS WASTE IN INCINERATORS, BOILERS, AND INDUSTRIAL FURNACES

These amendments finalize the technical and procedural standards related to permitting and operation of boilers and industrial furnaces (BIFs) burning hazardous waste. In general, these amendments act to incorporate the federal Resource Conservation and Recovery Act (RCRA) requirements applicable to BIFs burning hazardous waste into the requirements applicable to hazardous waste incinerators under the Colorado Hazardous Waste Regulations (CHWRs). In addition, these amendments also modify the existing health risk-based performance standard currently applicable to hazardous waste incinerators, and through these amendments, BIFs burning hazardous waste.

The Commission has incorporated the BIF requirements into the incinerator requirements in the CHWRs rather than adopting the requirements into a separate regulatory section as under the federal rule. Treatment of hazardous waste in a BIF is similar to treatment of hazardous waste in an incinerator. BIFs and incinerators both burn hazardous waste and both create similar types of hazardous emissions. BIFs and incinerators are operated in similar manners and share similar combustion systems designs. The similarities in the operation and design of BIFs and incinerators are reflected in the federal RCRA regulatory requirements. Although the Environmental Protection Agency (EPA) organized incinerator and BIF requirements into separate sections of the federal regulation, the operating standards, allowable hazardous waste emission limits, and administrative permitting standards and requirements for all of these devices are essentially equivalent. When Colorado revised it's incinerator requirements in 1995, it incorporated many of the requirements of the federal BIF regulations as they were considerably more stringent than existing incinerator requirements at that time.

By making BIFs subject to the same rules as hazardous waste incinerators, the Commission has determined that BIFs in Colorado should be subject to more stringent requirements than they would be under existing federal requirements. Incorporation of the BIF requirements into the incinerator requirements under the CHWRs strengthens the standards applicable to BIFs over those contained in the federal regulations. In addition to requiring compliance with the current federal regulatory requirements for BIFs burning hazardous waste, incorporation of the BIF requirements into the incinerator requirements in the CHWRs necessitates compliance with the health risk-based performance standard for hazardous waste air emissions, with enhanced emission standards for dioxins and particulates, and with a number of additional operating standards. The additional operating standards include periodic sampling requirements for environmental media surrounding an incineration facility, periodic stack emissions testing and reporting, compound specific monitoring, remote data acquisition for continuously monitored operating conditions and emissions, enhanced personnel training requirements, and enhanced emergency planning and response requirements.

The Commission approved these additional regulatory standards and requirements for incinerators in the 1995 rulemaking hearing. The Commission considered a large amount of information regarding hazardous waste combustion for both incinerators and BIFs during the 1995 rulemaking. Due to the similarities in the operation and design of incinerators and BIFs, the Commission believes that all the standards applicable to hazardous waste incinerators in the CHWRs are also appropriately applicable to BIFs burning hazardous waste. The rationale for each of the additional regulatory standards applicable to hazardous waste incinerators and, through these amendments, BIFs burning hazardous waste are described in the Statement of Basis and Purpose for Amended Regulations for Incineration of Hazardous Waste, pages 1269 -1285 of the CHWRs. Compliance with these additional regulatory standards and requirements is deemed necessary and appropriate to protect public health and the environment when hazardous waste is burned in these combustion devices.

The Commission has also decided to not adopt certain provisions of the federal RCRA BIF regulations into the CHWRs at this time. These provisions include 40 CFR Section 266.101 - Management prior to burning 40 CFR Section 266.108 - Small quantity on-site burner exemption 40 CFR Section 266.109 - Low risk waste exemption 40 CFR Section 266.110 - Waiver for DRE trial burn for boilers, and the MACT delegation language within 40 CFR Section 266.100 - Applicability. Omission of these regulations from the CHWRs does not result in regulations for BIFs burning hazardous waste that are less protective then the federal regulation. The provisions of 40 CFR Sections 266.108, 266.109 and 266.110 are less stringent than the requirements of these amendments and were not adopted so as to better protect public health and the environment.

40 CFR Section 266.101 requires owners or operators of BIF facilities burning hazardous waste to manage the waste as hazardous waste prior to being burned. In accordance with Section 266.101, a facility that burns hazardous waste in a BIF must comply with the generator standards, the transporter standards, and the standards for hazardous waste storage facilities, Parts 262, 263, and 264, 265 and 270 of the 40 CFR respectively. Under the federal regulation, the operating standard and emission limits for BIFs burning hazardous waste are contained within Part 266 - Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities. Part 266 of the federal RCRA regulation generally describes standards applicable to hazardous waste recyclers.

Adoption of Section 266.101 into the CHWRs is not necessary since the BIF requirements are being adopted into Part 264 - Standards for Owners or Operators of Treatment, Storage, or Disposal Facilities rather than Part 267 of the CHWRs, the regulatory equivalent of Part 266 in the federal regulation. While energy and material recovery are legitimate benefits of burning hazardous waste in BIFs, the primary purpose and economic driving force is hazardous waste treatment and disposal. Facilities regulated under Part 264 of the CHWRs must already comply with the requirements for generation, transportation, and storage of hazardous waste prior to burning the waste, making adoption of Section 266.101 unnecessary.

40 CFR Section 266.108 provides an exemption to the federal RCRA BIF requirements for owners or operators of BIFs burning hazardous waste in on-site burners. In accordance with Section 266.108, a BIF burning small quantities of hazardous waste, as defined under the exemption, does not have to comply with the BIF operating requirements or emission standards, and does not have to obtain a RCRA permit. The Commission is not electing to adopt this regulatory exemption at this time due to the complex and sensitive nature of managing a hazardous waste in a BIF. The EPA small quantity on-site burner exemption does not establish minimum specifications for the type of device that may be used or it's destruction efficiency. It also does not significantly restrict the types of hazardous wastes that may be burned in the device. The Commission finds that facilities that burn hazardous waste in a BIF should be subject to adequate operating, monitoring and testing procedures, waste composition limits, and other applicable health and safety requirements to ensure protection of the public and the environment. This exemption has not been included in these amendments because the potential impacts of such an exemption have not been evaluated by the Commission.

40 CFR Section 266.109 allows for exemption of the destruction removal efficiency (DRE) performance standard under the federal BIF regulation. In accordance with 40 CFR Section 266.109, a BIF facility burning hazardous waste does not have to comply with the DRE standard if the BIF is operated in conformance with certain operating requirements. These operating requirements include maximum allowable hazardous waste to fuel ratios, minimum heat values for the waste/fuel mixture, waste feed location requirements, and compliance with the carbon monoxide performance standard. In addition, a facility seeking this exemption must also demonstrate, in accordance with Section 266.109, that the hazardous waste burning will not pose an unacceptable adverse public health effect. Evaluation of the potential for an adverse public health effect is determined through a direct exposure risk assessment.

The Commission does not believe that exemption from the DRE performance standard is appropriate even given the operating limitations and direct exposure risk evaluation required under the federal exemption. Allowing standardized exemption of the DRE performance standard for a BIF burning hazardous waste is not appropriate given the variability in both the concentrations and toxicities of hazardous constituents that may be present in a particular hazardous waste being burned. The DRE performance standard, defined in Section 264.342(b) of the CHWRs or Section 266.102(e) of the federal regulation, is designed to control the emission of toxic organic compounds or products of incomplete combustion (PICs). Under the CHWRs, the DRE performance standard works in conjunction with the multi-pathway health risk assessment (MPHRA) performance standard to ensure adequate control over the release of organic compounds that may adversely affect human health or the environment. Compliance with the DRE performance standard ensures that the combustion device is providing effective destruction of hazardous constituents in the waste and the MPHRA performance standard ensures that PICs, those hazardous constituents that remain after adequate DRE, will be emitted at levels that do not pose a significant threat to human health or the environment. The control of hazardous emissions provided by the combined use of the DRE and the MPHRA performance standards was considered necessary by the Commission in the 1995 incinerator rulemaking.

40 CFR Section 266.110 allows for exemption from the trial burn requirement for specific types of boilers operating under certain conditions. DRE trial burns are used to demonstrate compliance with the DRE performance standard. The DRE trial burn provides for evaluation of compliance with the DRE performance standard under operating conditions rather than relying on theoretical or design calculations. The Commission is electing not to adopt this regulatory exemption due to the importance of the DRE performance standard described above regarding 40 CFR Section 266.109.

40 CFR Section 266.100 describes the applicability of the regulations for BIFs burning hazardous waste. Section 266.100(b) of the federal regulation describes the integration of the Clean Air Act (CAA), Maximum Achievable Control Technology (MACT) requirements, 40 CFR Part 63, Subpart EEE, with the BIF requirements under RCRA. The MACT standards establish emission limits and operational requirements for hazardous waste incinerators and cement kilns and lightweight aggregate kilns burning hazardous waste. In accordance with 40 CFR Section 266.100(b), a facility that demonstrates compliance with the MACT standards does not have to comply with the RCRA permit emission standards or operating requirements excepting certain sections. Certain emission standards and operating requirements that are established in the RCRA permit may be more stringent than the MACT standards due to site-specific considerations as necessary to protect human health and the environment.

According to the EPA, delegation of authority of the operating and emission standards for hazardous waste combustors from RCRA to the CAA is necessary to avoid duplicative permitting, administrative management, and enforcement of emission standards and operating requirements for those combustion devices subject to the MACT Standards. The mechanism of the MACT deferral results in some requirements remaining under a hazardous waste permit while other requirements would be removed from the jurisdiction of the permit (following the administrative process of modifying the permit). EPA's deferral does not eliminate the need for intra-Departmental coordination regarding dual regulation of the combustion facility.

EPA conducted a multi-pathway risk assessment to assess the ecological and human health risks that are projected to occur under the MACT standards and determined that “the MACT standards are generally protective of human health and the environment and that separate RCRA emission standards are not needed” (NESHAPS, pg. 52834). Importantly however, EPA's risk assessment “did not quantitatively assess the proposed standards with respect to mercury and non-dioxin products of incomplete combustion” (NESHAPS, pg. 52840), and they therefore continue to recommend that site-specific risk assessments (SSRAs) “be conducted as part of the permitting process” (NESHAPS, pg. 52841).

The Commission is electing not to incorporate the MACT delegation provision, 40 CFR Section 266.100(b), into the CHWRs. A regulatory strategy that divides operating requirements and emission standards between two different regulatory programs, and ultimately between two different permits (RCRA Part B Permit and CAA Title V Permit), is a confusing means by which to manage such a complex activity. Division of regulatory authority may also lead to conflicting operational and emission standards for these hazardous waste combustion facilities. The assorted operating requirements and emission standards for incinerators or BIFs burning hazardous waste all interplay with each other in a complex relationship. Maintaining one consistent regulatory framework over the entire activity ensures that the effects of changing one or more standard(s) do not significantly compromise or adversely impact other standards resulting in a threat to human health and the environment.

The Commission is electing to retain hazardous waste permitting authority over the entire operation of these combustion sources when burning hazardous waste because the emission standards may be more protective then the MACT requirements due to the use of the site-specific risk assessment and other more stringent requirements of the existing incinerator regulations. “Section 112 of the CAA requires emissions standards for hazardous air pollutants to be based on the performance of the Maximum Achievable Control Technology (MACT)”. “The MACT standards reflect the “maximum degree of reduction in emissions of hazardous air pollutants” that the Administrator determines is achievable, taking into account the cost of achieving such emission reduction and any nonair quality health and environmental impacts and energy requirements. Section 112(d)(2).” (NESHAPS, pg. 52832). Contrarily, “RCRA Sections 3004(a) and (q) mandate that standards governing the operation of hazardous waste combustion facilities be protective of human health and the environment” (NESHAPS, pg. 52839). As mentioned, burning hazardous waste in a BIF is done for the primary purpose of treatment and disposal of hazardous waste, inherently creating an economic benefit for a facility. Maintaining hazardous waste regulatory authority over the permitting and operation of these devices ensures that protection of human health and the environment is of primary concern and allowed to take precedent over cost and energy concerns when these facilities elect to burn hazardous waste.

Failure to adopt the MACT delegation provision will not result in regulations for cement kilns, light aggregate kilns, or incinerators burning hazardous waste that are less protective then the MACT standards. Under these amendments, the RCRA regulatory authority may require that the most protective standards for the combustion facility become standards in the final RCRA permit. Such standards may include but are not limited to any operating requirement or emission standard derived from the MPHRA, the CAA (i.e. the MACT Standards), or RCRA. Authority to require such protective permit conditions exists in the “omnibus” provision of 6 CCR1007-3, Section 100.43(a)(2). The intent of the Commission to implement the most protective combustion standards for these activities is reflected in both the MPHRA Performance Standard and amended Section 264.346(c)(1) (see amendments for BIF incorporation below, Revision (8) and Revision (3) for the changes to Part 264 and Part 100 of the CHWRs). Since the operating requirements and emission standards in the RCRA permit will be as protective if not more protective than the MACT standards, a facility will very likely be in compliance with the CAA if they are in compliance with the RCRA permit. In addition, problems related to dual regulation and administrative permitting for a cement kiln, light aggregate kiln, or incinerator burning hazardous waste will also be avoided through coordination between the regulatory programs.

STATUS OF BIFS BURNING HAZARDOUS WASTE IN COLORADO AND EFFECT OF AMENDMENTS

EPA currently retains enforcement authority over BIFs burning hazardous waste in Colorado. Under the federal requirements, all BIFs burning hazardous waste, regardless of whether or not they share a regulatory exemption to the federal BIF requirements, must notify the EPA of their existence. According to EPA Region VIII representatives, there are currently no BIFs burning hazardous waste in Colorado or anywhere else in Region VIII.

If a new BIF facility is proposed in Colorado, these amendments act to increase the regulatory requirements for the facility beyond those requirements specified under the federal regulations.

Currently, no hazardous waste incinerators operate in Colorado. Amendment of the health-risk based standard for incinerators burning hazardous waste, will not impact any existing facilities. Currently, hazardous waste incinerators must comply with the health-risk based performance standard 6 CCR 1007-3, Section 264.342(a). Regulatory amendment of the health risk-based standard as described in this Statement of Purpose and Basis results in only a minor increase in the level of technical permitting effort and will probably result in a more efficient permitting process for these facilities because the amended standards clarify the expectations for facilities electing to burn hazardous waste.

The Following Revisions Describe Incorporation of the Federal BIF Requirements into the CHWRs

Part 260 of the CHWRs

(1) REVISION: Addition of definitions pertaining to boilers and industrial furnaces (6 CCR 1007-3. Section 260.10): These amendments revise definitions for "Incinerator" and "Industrial Furnace" and add definitions for "Carbon regeneration unit", "Dioxins/Furans", "Halogen acid furnaces", "Infrared incinerator", "Plasma arc incinerator", "Sludge dryer", and "TEQ" to CHWRs. Definitions are equivalent with same definitions found in 40 CFR Section 260.10.

DISCUSSION: Federal regulation applicable to BIFs burning hazardous waste.

Part 261 of the CHWRs

(1) REVISION: Adoption of federal regulation pertaining to secondary materials fed to a halogen acid furnace (6 CCR 1007-3. Section 261.2) This amendment adopts the equivalence of 40 CFR Section 261.2 into Section 261.2 of the CHWRs clarifying the regulatory classification of secondary materials fed to halogen acid furnaces.

DISCUSSION: Federal regulation applicable to BIFs burning hazardous waste.

(2) REVISION: Adoption of federal regulation pertaining to classification of secondary wastes burned in a BIF (6 CCR 1007-3. Sections 261.4(b)(4) and (8)): This amendment revises 6 CCR 1007-3, Section 261.4(b)(4) and (8) by adopting the equivalence of 40 CFR Section 261.4(b)(4) and (8) to clarify that certain secondary wastes generated from the burning of hazardous waste in BIFs do not share regulatory exemption from being a hazardous waste and must be managed in accordance with 6 CCR 1007-3, Section 264.347, Regulation of residues (see amendments to Part 264 of CHWRs, Revision 6 below).

DISCUSSION: Federal regulation applicable to BIFs burning hazardous waste.

(3) REVISION: Adoption of federal regulation pertaining to requirements for recyclable materials burned in a BIF (6 CCR 1007-3, Section 261.6(a)(2)(ii)): This amendment revises 6 CCR 1007-3, Section 261.6(a)(2)(ii) by adopting reference to the interim status requirements for BIFs burning hazardous waste.

DISCUSSION: Federal regulation applicable to BIFs burning hazardous waste.

Part 264 of the CHWRs

(1) REVISION: Adoption of reference pertaining to the applicability of Part 264 to BIFs burning hazardous waste and federal regulation pertaining to notification of partial or final closure of a BIF (6 CCR 1007-3. Sections 264.1 and 264.112(d)(1)): This amendment revises 6 CCR 1007-3, Sections 264. l(g)(2) and 264.112(d)(l) by adopting reference to BIFs into the Part 264 applicability requirements and by adopting the equivalence of 40 CFR Section 264.112(d)(l) to require Department notification 45 days prior to partial or final closure of a BIF burning hazardous waste.

DISCUSSION: Federal regulation applicable to BIFs burning hazardous waste.

(2) REVISION: Adoption of federal regulation pertaining to regulatory applicability of BIF regulations (6 CCR 1007-3. Section 264.340): This amendment revises 6 CCR 1007-3, Section 264.340 by adopting and incorporating the equivalence of 40 CFR Section 266.100 to describe the applicability of the BIF requirements.

DISCUSSION: Federal regulation applicable to BIFs burning hazardous waste.

(3) REVISION: Adoption of federal regulation pertaining to waste analysis requirement for BIFs burning hazardous waste (6 CCR 1007-3. Section 264.341): This amendment revises 6 CCR 1007-3, Section 264.341 by adopting the equivalency of 40 CFR Section 266.102(b). Incorporation of the federal BIF regulatory section requires waste analysis and analysis of industrial furnace feedstocks fired into BIFs burning hazardous waste.

DISCUSSION: Federal regulation applicable to BIFs burning hazardous waste.

(4) REVISION: Adoption of federal requirements pertaining to hazardous waste emission performance standards for BIFs burning hazardous waste (6 CCR 1007-3. Sections 264.342, 264.343, 264.344 and 264.345): These amendments revise 6 CCR 1007-3, Sections 264.342 through 264.345 by incorporating reference to “boilers and industrial furnaces” into the emission performance standards already applicable to hazardous waste incinerators and by incorporating minor administrative changes necessary for consistency and equivalence with the federal regulation.

DISCUSSION: With the exception of the risk-based performance standard, 6 CCR 1007-3, Section 264.342(a), the current emission performance standards applicable to hazardous waste incinerators defined in 6 CCR 1007-3, Sections 264.342, 264.343, 264.344, and 264.345 are generally consistent with the federal BIF requirements, 40 CFR Sections 266.104, 266.105, 266.106, and 266.107 respectively. The emission performance standards for BIFs burning hazardous waste in the federal RCRA regulation were adopted into the CHWRs in a 1995 rulemaking hearing for hazardous waste incinerators because the standards were the most protective emission standards for hazardous waste combustors available at that time. Reference to BIFs, including specific requirements applying only to BIFs, was eliminated from the performance standards when they were adopted because the standards were only being applied to hazardous waste incinerators at that time.

These amendments act to re-incorporate reference to BIFs back into the incinerator requirements in the CHWRs resulting in emission performance standards that are applicable to BIFs burning hazardous waste and hazardous waste incinerators. Re-incorporation of reference to BIFs involves insertion of “boilers and industrial furnaces” into the performance standards and adopting additional BIF specific requirements described by the regulatory equivalencies of 40 CFR Sections 266.104(c), 266.104(d), and 266.104(f). Minor administrative revision of the performance standards in these sections is also necessary to adjust the numerical format of the requirements and to ensure equivalence with the federal BIF regulations.

The health risk-based performance standard, 6 CCR 1007-3, Section 264.342(a), is amended under this revision through the insertion of “boilers and industrial furnaces”. This amendment results in requiring BIFs burning hazardous waste to comply with the health risk-based performance standard. Additional amendment of the health risk-based performance standards for hazardous waste incinerators, and through this revision BIFs burning hazardous waste, is also described in the revisions describing amendments to the health risk-based performance standard (see below).

(5) REVISION: Administrative amendment of operating requirements and permit standards for BIFs and Incinerators burning hazardous waste (6 CCR 1007-3. Sections 264.346 and 264.347): These amendments revise 264.346 and 264.347 of the CHWRs by adopting the regulatory format (and equivalency) of 40 CFR Section 266.102, Permit standards for BIFs burning hazardous waste.

DISCUSSION: In 1983 when EPA promulgated the rule for regulation of hazardous waste incinerators, the process for permitting these types of RCRA units was not well defined. As a result, the incinerator rule, 40 CFR Part 264, Subpart O did not include emission standards for a number of hazardous waste constituents or a significant number of operating standards. In 1991, when EPA promulgated the BIF Rule, the requirements for BIFs burning hazardous waste were based on the emission standards and operating requirements for incinerators. The emission standards and operating requirements were however also enhanced to provide for more protective standards, and to provide for BIF specific detail relevant to the design and operation of BIFs. In addition to enhancing the emission standards and operating requirements from the Incinerator Rule, EPA also reformatted the relative location of the operating standards and permit standards into one section entitled “Permit Standard for Burners”, 40 CFR Section 266.102. Reformatting of these standards resulted in clarification of the requirements (general permit standards and operating requirements) applicable to hazardous waste burning BIFs.

Unfortunately, EPA did not, and has not, revised the emission standards, operating requirements, and format of the incinerator requirements in the federal hazardous waste incinerator regulations to make them consistent with the same standards under the BIF Rule. In 1995, the Division adopted the incinerator regulations with modification to include the emission standards and operating requirements promulgated under the federal BIF Rule. The general format of the federal incinerator regulations however was retained as the base for the incinerator regulations in the CHWRs.

The Commission is therefore now amending the incinerator regulations in the CHWRs to make the format of the requirements consistent with the format for the same requirements under the federal BIF Rule. This modification is being proposed to clarify the applicability of the requirements for incinerators and BIFs and involves the relocation and incorporation of Section 264.347 into Section 264.346 of the CHWRs. These amendments restructure these sections to be consistent and equivalent with the same requirements and structure of 40 CFR 266.102. The specific modifications to Sections 264.346 and 264.347 of the CHWRs are described as follows:

1. Relocation of Section 264.347(a) of the CHWRs to Section 264.346(b)(l1) of CHWRs; Create new Section 264.346(b) - Permits;

2. Relocation of Sections 264.347(b) and (c)(1 - 4) of the CHWRs to Sections 264.346(b)(2) and (3)(i - iv) of the CHWRs respectively;

3. Create new Section 264.346(c) - Operating Requirements, and incorporate operating requirements for emission standards described under Section 264.346; relocation of Section 264.347(c)(5) of the CHWRs to Section 264.346(c)(1) of the CHWRs;

4. Relocation of Sections 264.347(d) - (i) of the CHWRs to Sections 264.346(i) - (n) of the CHWRs respectively;

5. Renaming of Section 264.346 of the CHWRs from “Operating Requirements” to “Permit Standards for Burners”; reorganization and renumbering of remaining operating requirements in Section 264.346 to allow incorporation of appropriate sections from 264.347 of the CHWRs;

6. Revision of requirements in Section 264.346 of the CHWRs (formerly within both Sections 264.346 and 264.347 of the CHWRs) to include reference to the state analogs for the BIF specific operating or design requirements contained in 40 CFR 266.102.

(6) REVISION: Adoption of federal requirements pertaining to Standards for direct transfer and Regulation of residues for BIFs burning hazardous waste (6 CCR1007-3 Sections 264.346, 264.347:

These amendments adopt the equivalency of 40 CFR Sections 266.111 - Standards for direct transfer and Section 266.112 - Regulation of residues into the CHWRs. 40 CFR Section 266.111 includes requirements for managing hazardous waste that is transferred from a transport vehicle to a boiler or industrial furnace without the use of a storage unit. 40 CFR 266.112 includes requirements for managing residues derived from the burning or processing of hazardous waste in a boiler or industrial furnace.

DISCUSSION: 40 CFR Section 266.111, Standards for direct transfer are being adopted and incorporated into revised Section 264.346 of the CHWRs. Insertion of these standards into revised Section 264.346 of the CHWRs requires compliance with the standards for both incinerators and BIFs burning hazardous waste if the waste is transferred directly from a transport vehicle to the incinerator or BIF without the use of a storage unit. The standards for direct transfer are applicable to BIFs burning hazardous waste under the federal regulation. These standards are also appropriate for hazardous waste incinerators because hazardous waste may be directly transferred to an incinerator without the use of a storage unit. These standards outline engineering and operational controls for the transfer activity that are necessary to ensure adequate protection of human health and the environment.

40 CFR Section 266.112 - Regulation of residues is being adopted into revised Section 264.347 of the CHWRs. Insertion of these standards into revised Section 264.347 of the CHWRs requires compliance with the standards for BIFs only. These standards are applicable to BIFs because the residues generated from burning a hazardous waste in a BIF may also be products. Hazardous waste incinerators need not comply with these standards because the waste residue generated by an incinerator is a solid waste already and not a product. While an incinerator does not have to comply with these standards, a residue that is generated from a hazardous waste incinerator must be adequately characterized in accordance with 6 CCR 1007-3, Section 262.11.

(7) REVISION: Revision of regulatory provision allowing general exemption of the hazardous waste combustion requirements for facilities conducting trial burns of hazardous waste (6 CCR 1007-3 Sections 264.340(d) and 264.347(a)(1)): This amendment eliminates 6 CCR 1007-3, Sections 264.340(d) and 264.347(a)(1). Sections 264.340(d) and 264.347(a)(1) of the CHWRs allow for exemption of the incinerator requirements if a facility is conducting a trial burn in compliance with the requirements of 6 CCR 1007-3, Section 100.22(c).

DISCUSSION: See REVISION (2) under Part 100 Amendments (below).

(8) REVISION: Revise hazardous waste incinerator permit requirement for implementation of operating standards not included under the CHWRs (6 CCR 1007-3 Section 264.346(c)(1)): This amendment revises former Section 264.347(c)(5) of the CHWRs, Section 264.346(c)(1) of the CHWRs under these proposed amendments (see Revision (5) above), to clarify that the Director may develop any operating conditions or requirements in the permit to ensure compliance with the performance standards, Section 264.342 through 264.345 of the CHWRs.

DISCUSSION: Section 264.347(c)(5) of the CHWRs currently allows the Director to develop additional permit conditions necessary to protect human health and the environment if it is determined during the permitting process that stack emissions from a facility exceed or may exceed any performance standard under Part 264, Subpart O of the CHWRs. Under today's proposed amendments, Section 264.347(c)(5) becomes Section 264.346(c)(1) (see Revision (5) above). In addition to relocating this requirement, the Commission is also electing to administratively amend this requirement to clarify the regulatory authority of the Director to establish additional permit conditions as necessary to protect human health and the environment This clarification is necessary for consistency with the new location of the requirement in the CHWRs, and does not add or take away any authority that is not already defined by the requirement.

(9) REVISION: Adoption of BIF technical appendices associated with operating requirements and performance standards (6 CCR 1007-3 Section 264.348): This amendment revises Section 264.348 of the CHWRs by adopting the equivalent technical appendices, 40 CFR Part 266 Appendices I - XIII. The appendices are used to reference technical information related to the operating standards and emission performance standards under the BIF regulations.

DISCUSSION: Adoption of Federal Regulations pertaining to BIFs burning hazardous waste.

Part 265 of the CHWRs

(1) REVISION: Adoption of reference pertaining to the applicability of Part 265 of CHWRs to BIFs burning hazardous waste and federal regulation pertaining to the closure plan for interim status BIF facilities burning hazardous waste (6 CCR 1007-3 Sections 265.1(b)(6) and 265.112): This amendment revises 6 CCR 1007-3, Sections 265.1(b)(6) and 265.112 by adopting reference to BIFs into Part 265 of CHWRs applicability and by adopting the equivalence of 40 CFR Section 265.112 to require submission and notification of closure plans for interim status BIF facilities burning hazardous waste.

DISCUSSION: Adoption of federal regulation applicable to interim status BIF facilities burning hazardous waste.

(2) REVISION: Adoption of federal regulations pertaining to operating requirements for interim status BIF facilities burning hazardous waste (6 CCR 1007-3 Sections 265.140, 265.340 and 265.370): This amendment creates new Part 265, Subpart H Section 265.140 of the CHWRs by adopting the equivalence of 40 CFR Section 266.103 to establish operating requirements for interim status BIF facilities burning hazardous waste. This amendment also revises Sections 265.340 and 265.370 of the CHWRs by adopting the equivalence of 40 CFR Sections 265.340 and 265.370 to incorporate reference to the operating standards for interim status BIF facilities burning hazardous waste.

DISCUSSION: Adoption of federal regulation applicable to interim status BIF facilities burning hazardous waste.

Part 267 of the CHWRs

(1) REVISION: Elimination of standards applicable to burners of hazardous waste fuel (6 CCR 1007-3 Section 267.35): This amendment revises Section 267.35 of the CHWRs by eliminating the standards applicable to burners of hazardous waste fuel, and referencing to the requirements of Part 264, Subpart O for owners and operators who burn or process hazardous waste in boilers or industrial furnaces.

DISCUSSION: 6 CCR 1007-3, Section 267.35 describes standards applicable to boilers and industrial furnaces that burn hazardous fuel. These standards are being eliminated because BIFs burning hazardous waste, including hazardous fuel, are subject to the revised requirements in the CHWRs described in this statement of basis and purpose. Elimination of this section is also necessary for consistency with the federal regulations.

Part 100 of the CHWRs

(1) REVISION: Adoption of federal regulations pertaining to financial assurance for interim status facilities that have changed ownership (6 CCR 1007-3 Section 100.20(b)(5)): This amendment adopts the equivalence of 40 CFR Section 270.72(a)(4) requiring owners or operators of hazardous waste management facilities to demonstrate compliance with RCRA financial assurance requirements within six months of the dates of the change in ownership or operation control of the facility.

DISCUSSION: Adoption of federal regulation applicable to interim status hazardous waste management facilities.

(2) REVISION: Relocation and revision of requirements pertaining to administrative permitting procedures related to the trial burn for hazardous waste incinerators, and through these amendments BIFs burning hazardous waste (6 CCR 1007-3 Section 100.28): These amendments relocate Section 100.22(c) of the CHWRs to new Section 100.28 of the CHWRs and revise these requirements by adopting the equivalency of 40 CFR Section 270.66. These requirements outline the permitting phases, the trial burn requirements, and the pre-trial burn, post-trial burn multi-pathway health risk assessment standards for incinerators and BIFs burning hazardous waste.

DISCUSSION: Current Section 100.22 of the CHWRs describes RCRA short-term permits. In 1995, Subsection 100.22(c) was adopted into the CHWRs to describe the special requirements for Hazardous Waste Incinerator Permits. The Commission is electing to relocate subsection 100.22(c) to a new Section 100.28 of the CHWRs. This proposed amendment moves the standards that describe the individual phases involved in the permitting process, the requirements for conducting trial burns, and the pre-trial burn, post-trial burn MPHRA requirements for hazardous waste incinerators (and through these amendments BIFs burning hazardous waste) to Section 100.28, Special forms of RCRA permits. Relocation of these standards to Section 100.28 is necessary for consistency with the federal regulations (see 40 CFR Sections 270.62 and 270.66). 40 CFR Sections 270.62 - Hazardous waste incinerator permits, and Section 270.66 - Permits for boilers and industrial furnaces burning hazardous waste, are included in Subpart F to Part 270 of the federal regulations - Special Forms of Permits.

Hazardous waste incinerator and BIF permits are not considered short-term permits; rather they are considered special forms of RCRA Permits. At the time that the incinerator regulations were adopted, placement of the Hazardous waste incinerator permits section into Section 100.22(c) of the CHWRs seemed appropriate, because a provision in the federal incinerator regulations indicated that a facility could theoretically obtain a short-term RCRA permit to conduct a trial burn of hazardous waste without complying with the general requirements applicable to all facilities under a hazardous waste permit (a facility would be subject to only the operating requirements and trial burn requirements of Sections 264.346 and 100.22(c) of CHWRs or Sections 264.345 and 270.62 of 40 CFR respectively). This provision is described under Sections 264.340(d) and 264.347(a)(1) of the CHWRs (40 CFR Section 264.340(d) and 264.344(a)(1) respectively).

In practice, RCRA permits are not issued for short-term trial burns. Hazardous waste incinerator and BIF facilities must comply with all the applicable permit requirements (emission standards and operating requirements) in the regulations and be issued a permit prior to conducting a trial burn of hazardous waste. All requirements applicable to hazardous waste incinerators or BIFs, including but not limited to contingency planning, personnel training, waste analysis, and record keeping requirements are necessary to ensure that these facilities safely manage hazardous waste during the trial burn. Relocation of Section 100.22(c) - Hazardous Waste Permits, to Section 100.28 of the CHWRs clarifies the permitting requirements for a trial burn. In conjunction with this amendment Sections 264.340(d), 264.347(a)(1), and Section 100.22(c)(8) of the CHWRs will be eliminated, and Section 100.22 is numerically reformatted.

Revision of Sections 100.22(c)(1 - 4) of CHWRs (new Section 100.28(a - g) of CHWRs under this amendment) is also necessary to incorporate detailed language describing the trial burn process and requirements for conducting trial burns, and to restructure the regulation consistent with the federal BIF Rule. Revision of Section 100.22(c) per this amendment results in clarification of the permit requirements associated with the trial burn for incinerators and BIF facilities burning hazardous waste.

(3) REVISION: Revision of pre-trial burn MPHRA requirement pertaining to the comparison of the predicted ambient air concentration results from expected facility emissions with MACT emission standards (6 CCR1007-3 Section 100.28(h)(5)): This amendment revises Section 100.28(h), formerly Section 100.22(c)(5) of the CHWRs (see Revision (2) above), to include a comparison of the predicted ambient air concentrations from the expected emissions of a incinerator or BIF burning hazardous waste with the MACT Standards, 40 CFR Part 63, Subpart EEE.

DISCUSSION: These amendments require an owner or operator of a proposed incinerator or BIF facility to compare the expected emissions from the facility with the MACT Standards. Expected emissions are based on the hazardous wastes to be burned at a facility, the proposed engineering controls and design of the BIF or incinerator, and site-specific risk assessment and dispersion modeling. This amendment also clarifies that the Director may deny a permit for the active life of the facility if an approach cannot be provided by a facility to demonstrate that the standards in Subpart O to Part 264 of the CHWRs or MACT Standard cannot be met. Compliance with the Subpart O or MACT Standards is necessary to ensure that the permitted facility will be operated in a manner that is protective of human health and the environment. A facility that cannot demonstrate minimal compliance with these standards should not be issued a RCRA permit by the State.

(4) REVISION: Revision of post-trial burn MPHRA requirement pertaining to the comparison of measured emissions during a trial burn with the emission standards in the permit (6 CCR 1007-3 Section l00.28(i)(4)): This amendment combines former Sections 100.22(c)(6) and (7) into one section which has been relocated to Section 100.28(i)(4) of the CHWRs (see also Revision (2) above). This section requires comparison of the measured emissions during the trial burn for the facility with the trial burn emission standards in the permit.

DISCUSSION: This amendment requires an owner or operator of an incinerator or BIF facility to compare the results of measured emissions collected during the trial burn with the trial burn emission standards in the permit. If the expected emissions comply with the applicable trial burn standards in the permit then the trial burn standards in the permit become the final emission permit standards. If the trial burn standards are exceeded during the trial burn, then the owner or operator of the facility may be required to repeal the trial burn or modify the permit standards in accordance with 6 CCR 1007-3, Section 100.63.

(5) REVISION: Revision of requirement pertaining to information contents of the RCRA Part A Permit Application (6 CCR 1007-3 Section 100.40(b)): This amendment adds reference to BIFs into the additional information requirements for RCRA Part A Permit Applications.

DISCUSSION: 6 CCR 1007-3, Section 100.40 identifies the information that must be submitted with the RCRA Part A permit application for all hazardous waste management facilities. Section 100.40(b) of the CHWRs lists additional information requirements for hazardous waste incinerators. These requirements include corporate partnership and key personnel identification, technical qualification for key personnel, and information concerning historic facility compliance with federal, state, or local regulation. The Commission has elected to require BIFs burning hazardous waste to also meet the additional information requirements listed in 6 CCR 1007-3, Section 100.40(b) due to the similarities of BIFs burning hazardous waste with hazardous waste incinerators.

(6) REVISION: Revision of requirements pertaining to information contents of the RCRA Part B Permit Application (6 CCR 1007-3 Section 100.41(b)(6)): This amendment revises 6 CCR 1007-3, Section 100.41(b)(5) by adopting the equivalency of 40 CFR Section 270.22 - Specific Part B information requirements for boilers or industrial furnaces burning hazardous waste. These requirements are incorporated into the Specific Part B information requirements applicable to hazardous waste incinerators.

DISCUSSION: Adoption and incorporation of federal regulation applicable to BIFs burning hazardous waste.

(7) REVISION: Revision of requirements pertaining to public notice of permit actions and public comment period for facilities with BIFs burning hazardous waste (6 CCR 1007-3 Section 100.506): This amendment adopts reference to BIFs into the requirements for public notice notification of permit actions.

DISCUSSION: The Commission is electing to incorporate the same requirements regarding public notification of permit actions for BIFs as incinerators due to the similarities between BIFs and incinerators burning hazardous waste. Revision of these requirements to include reference to BIFs incorporates the applicability of these requirements to BIFs burning hazardous waste.

(8) REVISION: Revision of requirements pertaining to RCRA permit modifications for BIFs burning hazardous waste (6 CCR 1007-3. Section 100.63): This amendment adopts the equivalency of 40 CFR Section 270.42 regarding RCRA permit modifications for BIFs burning hazardous waste.

DISCUSSION: Adoption and incorporation of federal regulation applicable to BIFs burning hazardous waste.

The Following Revisions Describe Amendments to the Health Risk Based Performance Standard Applicable to Hazardous Waste Incinerators and BIFs Burning Hazardous Waste (through these Amendments)

Part 264 of the CHWRs

(1) REVISION: Revision of the MPHRA scope to include evaluation of acute inhalation exposure resulting from facility short-term emissions (6 CCR 1007-3 Section 264.342(a)(1)):

This amendment revises Section 264.342(a)(1) of the CHWRs with the addition of Section, 264.342(a)(1)(iii), to include evaluation of acute inhalation exposure resulting from facility short-term emissions under the scope of the MPHRA.

DISCUSSION: This amendment requires hazardous waste incineration facilities, and through these amendments, BIF facilities burning hazardous waste to evaluate acute inhalation exposures to hazardous constituents that may occur during system startup or shut down procedures, or other operational upset conditions. In general, the MPHRA evaluates the long-term or chronic effects of exposure to facility emissions that occur during the operational life of the facility. However, “In addition to long-term chronic effects, short-term or acute effects should be considered from direct inhalation of vapor phase and particle phase COPCs.” (EPA, 7-9) Short-term emissions may not have a significant effect on the end estimation of risk calculated during a MPHRA because that estimation considers operation over the life of the facility. “It is assumed that short-term emissions will not have a significant impact through the indirect exposure pathways (as compared to impacts from long-term emissions).” (EPA, 7-9)

This amendment is intended to assist the Department in establishing short-term emission rates for a facility that will be applicable to the facility during start-up and shut down operations involving the combustion of hazardous waste. In addition, evaluation of the acute effects during the MPHRA will allow the Department to better understand the significant short-term risks and constituent concentrations associated with those risks in the event of an emergency or other unexpected release of emissions. Understanding these emissions is essential to ensuring “that the risk assessment evaluates all receptors that may be significantly exposed to emissions from facility sources,” (EPA 4-11), that facility workers will be adequately protected in the event of an emergency, and that proper contingency procedures can be planned for responding to an emergency or other unexpected event involving the release of hazardous constituents.

(2) REVISION: Replacement of the Level II Standards (6 CCR 1007-3 Section 264.342(a)(2)): This amendment replaces the Level II Standards in 6 CCR 1007-3, Section 264.342(a)(2) with permit constituent specific emission standards. The standards are used during the operational period of a incinerator or BIF burning hazardous waste to determine compliance with the comprehensive MPHRA performance standard, 6 CCR 1007-3, Section 264.342(a).

DISCUSSION: This amendment is intended to provide the Department and regulated facility with a more straightforward method of determining facility compliance with the comprehensive MPHRA standard. The Commission is electing to replace the Level II Standards, currently defined under Section 264.342(a)(2) of the CHWRs with constituent-specific standards that are defined in the final RCRA operating permit. Compliance with the MPHRA Performance Standard will be determined by comparing the measured emissions from the facility directly to applicable permit standards in the final permit. During the permitting process, permit emission standards and relevant operating parameters and conditions will be designed to reflect the allowable level of health risk estimated under the MPHRA. If a facility is in compliance with the applicable numerical emission standards and operating requirements in the final permit, the facility will inherently also comply with the MPHRA Performance Standard. If it is determined that any of the measured constituent emissions exceed the applicable constituent emission standards in the final permit, then it will be considered a violation of the facility permit.

This amendment is also intended to clarify the regulatory procedures for modification of an emission standard in the final permit (see 6 CCR 1007-3, Section 264.342(a)(2)(i)). Under this proposed amendment, the Permittee may modify a permit emission standard at any time during the operating period for the facility. The Permittee must follow the administrative procedures for modification of a State RCRA Permit in Section 100.60 of the CHWRs. Modification of a State RCRA Permit to change a permit emission standard is considered a Class 3 Modification under the CHWRs requiring a public notice and hearing if necessary to discuss the proposed change. The RCRA regulatory authority will evaluate and make a decision to approve, not approve, or approve the modification with changes in accordance with the procedures described in 6 CCR 1007-3, Sections 100.60 and 100.63. These procedures are currently applicable to all RCRA permit modifications. The Commission is not adopting any changes to the permit modification procedures with this regulatory amendment.

In evaluating a proposed modification to an emission standard in the final permit, the MPHRA and a trial-burn may have to be repeated to demonstrate that the new emission standard(s), and all the remaining emission standards, comply with the estimated level of health risk allowed under the MPHRA Performance Standard. This regulatory amendment also clarifies that the MPHRA and/or a trial-burn may need to be repeated at any time a permit emission standard is proposed for modification.

Amendment of the Level II Standards is being adopted because the Level II Standards may not be adequate to measure compliance with the comprehensive MPHRA Standard in all instances. The Level II Standards do not reflect a health risk level that is as protective as the comprehensive MPHRA performance standard because the Level II Standards do not evaluate the health risk resulting from indirect exposure to emission contaminates. In instances where a significant amount of health risk results from indirect exposure to emission contaminates, a facility may be in compliance with the Level II Standards but not be in compliance with the comprehensive MPHRA Performance Standard. Since compliance with the comprehensive MPHRA Performance Standard is not revisited unless the Level II Standards are exceeded during a periodic monitoring event, a facility could theoretically be emitting hazardous constituents at levels that have not been demonstrated to be protective of human health and the environment.

Amendment of the Level II Standards may also result in permit standards for additional constituents (in addition to those defined under the current Level II Standards) and more protective emission levels depending on the types and levels of hazardous constituents in the waste burned. Amendment of the Level II Standards allows the Department to develop those emission standards in the permit at levels that demonstrate adequate protection of human health and the environment as evaluated through the MPHRA.

The Commission believes that compliance with permit constituent specific emission standards as described under this amendment will provide a better method by which to determine facility compliance with the comprehensive MPHRA standard. The regulatory amendment will result in a more definitive understanding of the standards necessary to ensure protection of human health and the environment. This definitive understanding will benefit the facility, the Department, and the public, because ambiguity in measuring facility compliance with the MPHRA Performance Standard will be eliminated.

(3) REVISION: Administrative Revision of the Level I Standard (6 CCR 1007-3 Section 264.342(a)): This amendment revises the former Level I Standard, the comprehensive MPHRA standard described in 6 CCR 1007-3, Section 264.342(a) for clarification purposes.

DISCUSSION: Administrative revision of the former Level I Standard is necessary to clarify the requirements for conducting either the pre-trial burn or post-trial burn MPHRA, to reflect replacement of the Level II Standards with permit specific emission standards (see Revision (2) above), and to reflect the addition of the requirement to evaluate acute inhalation exposure resulting from facility short-term emissions (see Revision (1) above). This proposed amendment essentially restructures the current Level I standard into one section with three separate subsections, and eliminates nomenclature reference to the standard as the "Level I Standard" throughout Parts 264 and 100 of the CHWRs. The functional aspect of the MPHRA standard remains unaffected by this proposed amendment.

Part 100 of the CHWRs

(1) REVISION: Revision of requirement pertaining to the evaluation of risk posed to children under the scope of the MPHRA (6 CCR 1007-3 Section 100.22(h) and (i): This amendment revises 6 CCR 1007-3, Section 100.28(h) and (i) by clarifying that the MPHRA must include examination of health risk posed to both children and adults.

DISCUSSION: Sections 100.28(h) and (i), formerly Section 100.22(c)(5) and (6) of the CHWRs (see amendments for incorporation of BIF regulations, Revision (2) to Part 100) describe the specific procedures for conducting the Pre-trial Burn and Post-trial Burn MPHRAs. The Commission is adopting regulatory language to these sections to clarify that the MPHRAs must examine not only health risk posed to adults but also health risk posed to children. Evaluation of health risk posed to children during the MPHRA is important because children are considered a part of the sensitive subpopulation that the risk assessment must examine to ensure adequate protection. Moreover, children have a greater quantifiable exposure through direct inhalation and indirect (ingestion and dermal contact) pathways when expressed as the dose rate per body weight because children have lower body weights. Therefore, children are at a greater risk than adults. Examination of the risk posed to both adults and children under a MPHRA is consistent with EPA Combustion Risk Assessment Guidance and application of risk assessment under the RCRA Corrective Action Program.

Incorporation of EPA Preamble Language By Reference

Applicable portions of the preamble language from the following Environmental Protection Agency final rules published in the Federal Register are hereby incorporated by reference:

1) Burning of Hazardous Waste in Boilers and Industrial Furnaces, 56 Fed. Reg. 7134-7240 (February 21, 1991).

2) Burning of Hazardous Waste in Boilers and Industrial Furnaces; Corrections and Technical Amendments, 56 Fed. Reg. 32688-32886 (July 17, 1991).

3) Burning of Hazardous Waste in Boilers and Industrial Furnaces; Technical Amendments, 56 Fed. Reg. 42504-42517 (August 27, 1991).

4) Burning of Hazardous Waste in Boilers and Industrial Furnaces; Technical Amendments, 57 Fed. Reg. 38558-38566 (August 25, 1992).

5) Burning of Hazardous Waste in Boilers and Industrial Furnaces; Technical Amendments, 57 Fed. Reg. 44999-45001 (September 30, 1992).

6) Requirements for Preparation, Adoption, and Submittal of Implementation Plans, 58 Fed. Reg. 38816-38884 (July 20, 1993).

7) Burning of Hazardous Waste in Boilers and Industrial Furnaces; Interim Final Rule, 58 Fed. Reg. 59598-59603 (November 9, 1993).

8) Land Disposal Restrictions Phase II - Universal Treatment Standards, and Treatment Standards for Organic Toxicity Characteristic Wastes and Newly Listed Wastes, 59 Fed. Reg. 47982-48109 (September 19, 1994).

9) Final Standards for Hazardous Air Pollutants for Hazardous Waste Combustors, 64 Fed. Reg. 52828-53077 (September 30, 1999).

10) Final Standards for Hazardous Air Pollutants for Hazardous Waste Combustors; Technical Correction, 64 Fed. Reg. 63209-63213 (November 19, 1999).

11) Standards for Hazardous Air Pollutants for Hazardous Waste Combustors; Final Amendments Rule, 67 Fed. Reg. 6968-6996 (February 14, 2002).

References

1. EPA. "Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities". Volume I, United States Environmental Protection Agency Region 6, July, 1998.

2. CDPHE, "Statement of Basis and Purpose for Amended Regulations for Incineration of Hazardous Waste", Rule Making Hearings, October 18, 1994, November 15, 1994, January 17, 1995, February 21, 1995, April 18, 1995, and May 16, 1995

3. NESHAPS, "Final Standards for Hazardous Waste Air Pollutants for Hazardous Waste Combustors: Final Rule". 64 Fed. Reg. 52828 et seq., September 30, 1999, United States Environmental Protection Agency

Statement of Basis and Purpose - Rulemaking Hearing of August 12, 2003

8.52 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 261 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of Part 261. Appendix IX to Conditionally Delist F006 Hazardous Waste Generated by Photo Stencil located at 4725 Centennial Boulevard in Colorado Springs. Colorado 80919

Appendix IX of Part 261 is being amended at this time to conditionally delist F006 hazardous waste generated at Photo Stencil in Colorado Springs, Colorado. This delisting will allow Photo Stencil to dispose of this waste at a solid waste landfill that meets the requirements of the Colorado Solid Waste Regulations 6 CCR 1007-2, provided it complies with the conditions of the delisting.

On June 17, 2003, the Hazardous Waste Commission ("Commission") tentatively approved Photo Stencil's petition to delist F006 hazardous waste generated at Photo Stencil's manufacturing facility located at 4725 Centennial Boulevard in Colorado Springs, Colorado 80919. Pursuant to the provisions of § 25-15-302(2), C.R.S. and 6 CCR 1007-3, § 260.20(c), a public notice of the tentative decision to approve the delisting was published in the Colorado Register for written public comment. The public comment period closed on August 10, 2003. No comments were received. On August 12, 2003, the Commission voted to make the decision final. The delisting will become effective 20 days after publication in the Code of Colorado Regulations ("CCR") at 6 CCR 1007-3.

Photo Stencil operates a manufacturing facility in Colorado Springs, Colorado for the production of stencils for the computer board and component manufacturing industry. Some of the metal finishing operations conducted by the company are electro forming (i.e., nickel electroplating), metal preparation, ferric chloride etching, and specialty nickel plating. Wastewater that is generated from these operations is treated on-site to remove heavy metals. The process of treating the wastewater generates a wastewater treatment sludge that is classified as a F006 listed hazardous waste. The F006 hazardous waste listing in § 261.31 describes wastewater treatment sludge that is generated from electroplating operations.

The basis for each hazardous waste listing is described in Appendix VII of Part 261. Each listing is based on hazardous constituents that are typically contained in wastes described by the listing. The hazardous constituents that formed the basis for the F006 listing include cadmium, hexavalent chromium, nickel, and cyanide (complexed).

Wastewaters from the electroplating and chemical etching processes are transferred via pipes to a collection tank, pumped into a treatment cone, and then treated with magnesium sulfate and sodium hydroxide to precipitate the metals. Following the treatment process, the liquid is decanted and the resulting sludge is pumped through a filter press forming a filter cake (i.e., a wastewater treatment sludge).

Analytical sampling of the F006 sludge was conducted prior to the submittal of the delisting petition. The electroplating and chemical etching processes do not significantly change on a day-to-day basis. The samples that were collected in support of the delisting petition have been determined to be representative of the waste in question. The Hazardous Materials and Waste Management Division at the Colorado Department of Public Health and Environment (the Division), evaluated the sampling results and the petition to delist the waste in accordance with § 260.22.

With regard to analysis of the constituents that formed a basis for listing the waste as an F006 hazardous waste, the analytical results indicate that the waste did not contain detectable concentrations of cadmium, hexavalent chromium, or complexed cyanide. The results of the analysis further indicate that the waste contains detectable concentrations of nickel. Nickel was detected at and average total concentration of 7,597 parts per million.

Based on health-based risk assessment calculations derived using the general assumptions outlined in the Division's current risk assessment policy, the waste in question has been determined to exceed residential risk-based levels, almost exclusively due to the presence of nickel. However, the concentration of nickel is less than the preliminary remediation goals established by Region 9 of the EPA. Therefore, the Division believes that risk to human health and the environment will be minimized if this waste is managed in a compliant Subtitle D solid waste landfill.

Analytical sampling of the waste also indicated that the waste contained detectable concentration of arsenic, barium, trivalent chromium, copper, and lead. Based on health based risk assessment calculations and average background soil conditions, the Division determined that the waste did not contain concentrations of those metals at levels which would be considered harmful to human health or the environment.

Using TCLP analytical tests, the Division evaluated the potential for hazardous constituents to leach from the waste and contaminate groundwater. The results of the TCLP analysis indicated that arsenic does not show any chemical potential to leach out of the waste. The TCLP analysis also showed that barium, cadmium, total chromium, and lead are well below the maximum concentrations of contaminants for the toxicity characteristic identified in Part 261, Section 24, Table 1. There are no maximum concentrations listed in Table 1 for the toxicity characteristic for copper and nickel. However, the TCLP analysis shows that copper and nickel have only a small potential to leach from the waste. Photo Stencil has indicated that all delisted sludge will be disposed in a compliant Subtitle D solid waste landfill. Disposal in a solid waste landfill will ensure protection of human health and the environment from any metals contained in leachate that might migrate from the waste.

Further, the results of the waste sampling indicated that the wastewater treatment sludge does not contain any organic constituents. Consideration of the potential health effects caused by exposure to organic constituents was therefore not considered in evaluating the petition by the Division.

This delisting is being granted under conditions that specify disposal, record keeping, and storage requirements for the delisted sludge. Conditional delisting of the waste also prohibits any major changes to the electroplating and chemical etching or wastewater treatment process without prior notification, evaluation, and approval by the Division.

This delisting does not apply to waste that demonstrates “significant changes” as defined in Delisting #006 in Part 261, Appendix IX--Wastes Excluded Under § 260.20 and § 260.22(d), or if any of the conditions specified in Part 261, Appendix IX for this delisting are not met. Should either of these occur, the waste is and must be managed as a hazardous waste.

Statement of Basis and Purpose - Rulemaking Hearing of July 20, 2004

8.53 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 261, 262, 263, 264, 265, 268, 273, 279, 2, 99, 100, 6 and Part 7 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S and in § 25-15-314(1), C.R.S.

Colorado Hazardous Waste Notification Form

The Colorado Department of Public Health and Environment has developed a state-specific notification form for regulated hazardous waste activity occurring in the state. The new Colorado Hazardous Waste Notification Form standardizes the site information that was previously collected on the Notification of Regulated Waste Activity (EPA Form 8700-12), the RCRA Hazardous Waste Part A Permit Application (EPA Form 8700-23) and the biennial Hazardous Waste Report (EPA Form 8700-13A/B). Submission of this form satisfies the requirements to notify the State and the US EPA of a facility’s regulated waste activities and obtain an EPA Identification Number. The Department requires the use of the new Colorado Hazardous Waste Notification Form to notify of regulated waste activities, and the use of EPA Form 8700-12 (any revision) will no longer be accepted.

These amendments revise Parts 262, 263, 264, 265, 273, 279 and 99 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) to replace the references to EPA Form 8700-12 with a reference to the new Colorado Hazardous Waste Notification Form.

The Colorado Hazardous Waste Notification Form and Instruction are available on the Department’s website at http://www.cdphe.state.co.us/hm/notification.asp

Removal of Cite References to 40 CFR Part 266, Subpart H

These amendments revise § § 264.1033, 264.1082, 264.1087, 265.1033, 265.1083 and 265.1088 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) to remove the cite references to 40 CFR Part 266, Subpart H. The references to 40 CFR Part 266, Subpart H are being replaced with references to either the permit requirements of Part 264, Subpart O, or the interim status requirements of Part 265, Subpart H for boilers or industrial furnaces. Amended regulations for burning hazardous waste in incinerators, boilers, and industrial furnaces were adopted by the Hazardous Waste Commission on June 17, 2003.

Amendment of § 6.04

Section 6.04 is being amended by revising paragraph (a) to reflect the annual Commission fees to be assessed for fiscal year 2004-2005.

Correction of Typographical Errors and Inadvertent Omissions

These amendments correct typographical errors and inadvertent omissions that exist in Parts 260, 261, 262, 263, 264, 265, 268, 273, 279, 2, 100, and Part 7 of the current regulations, and provide state equivalency with the applicable federal requirements.

Statement of Basis and Purpose - Rulemaking Hearing of October 19, 2004

8.54 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 264 and Part 100 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S and in § 25-15-314(1), C.R.S.

Amendments to the Corrective Action Management Unit (CAMU) Rule

These amendments revise Parts 260, 264 and 100 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) to correspond to federal regulations promulgated by the Environmental Protection Agency (EPA) and published in the Federal Register on January 22, 2002 (67 FR 2962-3029).

Corrective Action Management Units, or “CAMUs,” are special units created under the Resource Conservation and Recovery Act (RCRA) to facilitate treatment, storage, and disposal of hazardous wastes managed for implementing cleanup, and to remove the disincentives to cleanup that result from applying RCRA regulations for as-generated hazardous wastes to cleanup wastes. The original federal CAMU regulations were promulgated on February 16, 1993 (58 FR 8658-8685). State analogs to the federal provisions were adopted by the Hazardous Waste Commission on May 17, 1994. In adopting state analogs to the original CAMU provisions, the Commission made certain changes to the state analogs to account for certain differences in state law from federal law, to address state issues, and to express the Commission’s intent in adopting the rules. Additional information regarding these changes can be found in the Statement of Basis and Purpose from the Rulemaking Hearing of May 17, 1994, which is published at § 8.10 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3).

Colorado currently has authorization from EPA for corrective action, but is not authorized for the 1993 CAMU regulations. States that have authorization for corrective action but not the 1993 CAMU rule are not required to seek authorization for the CAMU amendments. This is because these states’ corrective action and Land Disposal Restrictions are more stringent than the federal CAMU regulations. However, because CAMUs are an integral part of corrective action, EPA strongly encourages states to adopt the CAMU regulations.

This rule promulgates regulations that are more stringent than the existing 1993 federal CAMU regulations. Because Colorado already adopted state analogs to the federal 1993 CAMU provisions, Colorado is hereby amending its existing CAMU regulations to correspond to the new 2002 federal CAMU provisions.

The amendments being adopted at this time include:

1) Revising the definition of "Remediation waste" in § 260.10 to remove the phrase "that contain listed hazardous waste or that themselves exhibit a hazardous waste characteristic.";

2) Revising the title for Part 264 Subpart S, "Corrective Action for Solid Waste Management Units," to read "Special Provisions for Cleanup.";

3) Adding Section 264.550 "Applicability of Corrective Action Management Unit (CAMU) Regulations." to Subpart S of Part 264;

4) Redesignating Section 264.552 as Section 264.551, and revising the section heading and paragraph (a) introductory text;

5) Adding a new Section 264.552 "Corrective Action Management Units (CAMU)" to Subpart S of Part 264;

6) Revising paragraph (b), and adding subparagraphs (b)(1) and (b)(2) of § 264.553 Temporary Units (TU);

7) Adding paragraph (a)(1), adding and reserving paragraph (a)(2), and revising paragraph (b) of § 264.554 Staging Piles; and

8) Revising § 100.21(e) and § 100.26(d)(3) to add a cite reference to § 264.551.

Colorado is not adopting a state analog at this time for the optional federal provisions of 40 CFR § 264.555 "Disposal of CAMU-eligible wastes in permitted hazardous waste landfill." The § 264.555 requirements are less stringent than existing requirements, and Colorado is evaluating the legal and policy issues related to these requirements. Colorado may propose state analogs to these federal provisions be adopted at a later date.

The Commission has modified the EPA CAMU rule to be more stringent in several respects. The Commission finds that these more stringent provisions are necessary to protect the public health and environment of the state. The rationale supporting adoption of each of these more stringent provisions is set forth below.

Colorado's definition of "CAMU-eligible waste" is more stringent than the federal definition of 40 CFR 264.552(a)(1). Unlike the federal provision, § 264.552(a)(1) of the Colorado hazardous waste regulations does not allow: (1) management in a CAMU of wastes that are first placed in tanks, containers, or other non-land based units as part of cleanup; or (2) management in a CAMU of containers that are excavated during the course of cleanup. In both cases, however, if the wastes in (or placed in) the tanks, containers, or other non-land-based units are chemically and physically similar to associated contaminated media, they are considered CAMU-eligible wastes.

This amendment to the EPA rule prevents disposal of highly concentrated waste in the CAMUs. Highly concentrated wastes are more likely to leach or pose incompatibility problems. Further, allowing disposal of concentrated wastes in a CAMU does not appear to be necessary to facilitate use of CAMUs. EPA's analysis of CAMUs approved under the 1993 CAMU rule showed no evidence that waste in intact containers had ever been placed in a CAMU. See 67 Fed. Reg. 2969. Finally, EPA's rationale for adopting this provision -- that if facility owners were not allowed to place wastes in intact or substantially intact containers, tanks, etc. in CAMUs, they would simply leave them in place -- is misplaced. In most (if not all) cases, CAMUs would only be considered at sites where the Division has corrective action authority. At such sites, the decision whether it is acceptable to leave buried drums in place lies with the Division, not the facility owner/operator.

Colorado is adopting a state analog which is more stringent than the minimum design requirements of 40 CFR 264.552(e)(3). The federal regulations specify a particular engineering design for a disposal CAMU: a composite liner and leachate collection system. The federal rule does allow for alternative CAMU design requirements that are at least as effective as the liner/leachate collection system set forth in the federal rule. The state regulation is more stringent because designation of a disposal CAMU triggers the applicability of Colorado's Hazardous Waste Siting Act, § 25-15-201 et seq. Pursuant to that Act, Colorado previously promulgated performance-based standards for hazardous waste disposal sites that are more stringent than the engineering design set forth in the federal CAMU rule. Because any CAMUs designated under § 264.552 would have to meet these more stringent standards in any case, the engineering design set forth in the federal rule is irrelevant. Therefore, the state CAMU rule incorporates the Siting Act's narrative, performance based standards as the minimum design standards for CAMUs.

In addition, the Commission notes that an alternative design may often be required, as experience in Colorado shows that the prescriptive design in the federal rule may not be compatible with CAMU-eligible wastes. For example, at the Rocky Mountain Arsenal, the prescriptive design promulgated by EPA would not have provided reasonable assurance that the wastes would remain isolated within the designated disposal area for the CAMU. See "Modeling of Four Different Landfill Liners in Support of the 1,000 Year Protectiveness of the Environment Criteria for the Rocky Mountain Arsenal CAMU Landfill," M. Schnarr, January 26, 1996 (analysis of a more robust composite liner than that proposed by EPA demonstrated that the liner was not adequate to meet Part 2 siting standards. This document is on file with the Division).

In adopting a state analog to 40 CFR § 264.552(e)(4)(i)(A)(1), Colorado revised the defining criteria for principal hazardous constituents (PHCs) to specify that the Director will designate as principal hazardous constituents: (1) carcinogens that pose a potential direct risk from combined exposure pathways at the site at or above 1 x 10-4 using an unrestricted use exposure scenario; and (2) non-carcinogens that pose a potential direct risk from combined exposure pathways at the site an order of magnitude or greater than their reference concentration using an unrestricted use exposure scenario. This is more stringent than the 1 x 10-3 risk level used in the federal provision that is based only on an ingestion or inhalation exposure pathway. The 10-3 level in the CAMU rule is significantly less stringent than other remedial programs, and the decision not to consider risks from all pathways is likewise less stringent. For example, the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300) (NCP) indicates that acceptable exposure levels for suspected carcinogens are "generally concentration levels that represent an excess upper bound lifetime cancer risk to an individual of between 10-4 and 10-6" and that the 10-6 level shall be used as the point of departure for determining remediation goals. Further, the 10-4 level is consistent with Colorado's approach to site remediation at sites not using CAMUs, as set forth in CDPHE's Corrective Action Guidance Document.

In adopting a state analog to 264.552(e)(6)(v), Colorado added an additional, more stringent requirement that CAMUs in which waste will remain after closure must have an environmental covenant pursuant to § 25-15-320, C.R.S. This provision is necessary because such CAMUs meet the statutory threshold for requiring an environmental covenant. See § 25-25-320(2), C.R.S.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 67 FR 2962-3029, January 22, 2002.

Statement of Basis and Purpose - Rulemaking Hearing of January 11, 2005

8.55 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 262 and 264 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Environmental Leadership Program

These amendments revise Part 262 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) to correspond to National Environmental Performance Track regulations promulgated by the Environmental Protection Agency (EPA) and published in the Federal Register on April 22, 2004 (69 FR 21737-21754), and as amended on October 25, 2004 (69 FR 62217-62224).

Colorado's Environmental Leadership Program (http://www.cdphe.state.co.us/el/elp/elphom.asp) is a statewide environmental recognition and reward program administered by the Colorado Department of Public Health and Environment's (Department's) Sustainability Program. The Environmental Leadership Program (ELP) is designed to recognize and encourage top environmental performers-those companies that voluntarily go beyond compliance with state and federal regulatory requirements to attain levels of environmental performance and management that provide greater benefit to people, communities, and the environment. This voluntary incentive and recognition program encourages program members to focus on issues important to their communities and to take a creative approach to solve local problems and achieve environmental goals.

The Colorado Department of Public Health and Environment and the U.S. Environmental Protection Agency have worked together to align the Colorado Environmental Leadership Program and EPA's National Environmental Performance Track (NEPT). This allows companies, municipalities and other organizations to apply to one or both programs with one application and submit only one annual report while receiving the benefits of both programs.

The Gold Level of Colorado's Environmental Leadership Program is equivalent to EPA's National Environmental Performance Track, and is currently the highest level of environmental recognition awarded by the state. Interested companies or organizations must apply to the program and meet a number of criteria to be eligible for membership. For example, leadership members must have a comprehensive and operational environmental management system that includes continual environmental improvement goals and a community outreach plan. In exchange for the environmental commitment and superior environmental performance, Colorado's leadership program provides benefits and incentives such as recognition, regulatory flexibility, public-private partnerships, networking and technical assistance to its environmental leaders. Initially, members are accepted into the Environmental Leadership Program for a three-year term. Prior to the end of the initial membership term, members are evaluated by the Department and the term extended if continual environmental goals and other leadership criteria continue to be met.

Today's amendments are applicable to entities that are members of both Colorado's Environmental Leadership Program and EPA's National Environmental Performance Track. These amendments allow large quantity generators (LQGs) of hazardous waste that are Gold Level members of Colorado's Environmental Leadership Program and members of EPA's National Environmental Performance Track to accumulate hazardous waste for up to 180 days (or up to 270 days in certain cases) without a RCRA permit or without having interim status, subject to certain limitations and conditions. Under the current standards of § 262.34 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3), LQGs may accumulate hazardous waste on-site for up to 90 days without having to obtain a RCRA permit. Today's extended accumulation time requirements are being added as new paragraphs k, l, and m to § 262.34 of Colorado's hazardous waste regulations.

These amendments provide state equivalency with the federal rules that were published in the Federal Register on April 22, 2004 (69 FR 21737-21754), and amended on October 25, 2004 (69 FR 62217-62224). These amendments are considered less stringent than the existing state regulations because it allows more than the 90 days of accumulation time that is in the existing regulations. Colorado is, therefore, not required to adopt state analogs to these requirements.

The regulatory flexibility of these provisions is intended to serve as an incentive for facility membership in Colorado's Environmental Leadership Program and EPA's National Environmental Performance Track while ensuring the current level of environmental protection by the relevant RCRA provisions. The Department believes that additional accumulation time will allow generators to accumulate enough waste to make transportation to waste management facilities more cost effective and efficient for the generator. The Department also believes that additional accumulation time may result in environmental benefits related to the reduction in the movement and handling of hazardous waste on-site, as well as fewer off-site shipments. This additional accumulation time for Colorado Environmental Leadership Program and EPA National Environmental Performance Track members is also consistent with the rationale used for the F006 (metal finishing) hazardous waste rule (65 FR 12377, March 8, 2000) for which the Hazardous Waste Commission adopted state analogs at its November 21, 2000 Hearing.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 69 FR 21737-21754, April 22, 2004, and as amended at 69 FR 62217-62224, October 25, 2004.

Amendment of Appendix VII to § 264.348

The Nonmetals—Residue Concentration Limits section of Appendix VII to § 264.348 - Health-Based Limits for Exclusion of Waste-Derived Residues is being amended to add constituent listings and concentration limits for numerous constituents that were inadvertently omitted from Appendix VII when the appendix was adopted as part of the June 17, 2003 Hazardous Waste Commission rulemaking regarding Amended Regulations for Burning Hazardous Waste in Incinerators, Boilers, and Industrial Furnaces. These amendments provide state equivalency with the federal regulatory requirements of 40 CFR Part 266, Appendix VII of the Environmental Protection Agency.

Correction of Typographical Errors and Omissions

In addition these amendments also correct typographical errors that occur in Appendix IX to § 264.348 of the current regulations.

Statement of Basis and Purpose - Rulemaking Hearing of June 21, 2005

8.56 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 6 is made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-314(1), C.R.S.

Amendment of § 6.04

Section 6.04 is being amended by revising paragraph (a) to reflect the annual Commission fees to be assessed for fiscal year 2005-2006.

Statement of Basis and Purpose - Rulemaking Hearing of August 16, 2005

8.57 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 261, 263, 265, 100 and 279 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of § 261.31(a) (Clarification of F019 hazardous waste listing)

Section 261.31(a) of the Colorado Hazardous Waste Regulations (6 CCCR 1007-3) is being amended at this time by adding a clarification note to the F019 hazardous waste listing defining "conversion coating" as follows: "For the purposes of the F019 listing, conversion coating is intended to include coloring, phosphating, and immersion plating when those processes are used to impart a conversion coating on aluminum."

The existing listing description for the F019 wastewater treatment sludge does not provide clarification to the regulated community as to the definition of conversion coating. Therefore, many facilities that operate a conversion coating process on aluminum do not recognize that the associated wastewater treatment unit is generating an F019 listed hazardous waste.

The purpose of this amendment is to help clarify the scope of the F019 listing description by specifying what is considered to be included in the definition of "conversion coating".

Amendment of § 263.12 (Transfer facility requirements)

Section 263.12 of the Colorado Hazardous Waste Regulations is being amended at this time by adding a new subparagraph (b)(1) as follows: § 263.12(b)(1) The owner or operator of a transfer facility must maintain documentation to verify that the ten-day storage requirement of § 263.12(b) has been met. Information used to make this demonstration may include hazardous waste manifests, log sheets, or other documentation showing the date of waste arrival and shipment from the transfer facility.

The existing transfer facility requirements at 6 CCR 1007-3, § 263.12 do not require the owner or operator of a transfer facility to document or otherwise demonstrate that the ten-day storage limit has been met. In most cases, the date that the waste is placed into storage is the same date identified on the manifest by Transporter 1. However, wastes are often picked up on routes that may extend out of state and last several days before being brought to the transfer facility. In those cases, there is not a clear paper trail to evaluate compliance with the ten-day storage limit.

The purpose of this amendment is to provide a mechanism for Department compliance officers to evaluate a transfer facility's compliance with the ten-day storage limit requirements of § 263.12 by requiring the owner or operator of the transfer facility to maintain documentation to verify the time waste is stored at the transfer facility.

The Commission has evaluated the information presented at the rulemaking hearing, as well as the information in the Statement of Basis and Purpose. The Commission considers this information sufficient to justify adopting the proposed rule. The Commission finds that this rule is necessary to protect public health and the environment.

Amendment of § 265.52 (Content of contingency plan)

Section 265.52 of the Colorado Hazardous Waste Regulations is being amended at this time by adding a new paragraph (g) as follows: § 265.52(g) The plan must specify: (1) the fire protection district responsible for providing fire protection services to the facility, or (2) that the facility is not within a fire protection district but is operating under its own fire protection plan that has been approved by the Department.

The existing contingency plan and emergency procedures requirements in Subpart D of 6 CCR 1007-3, Part 265 do not require a generator to identify the fire protection district responsible for providing fire protection services to the facility. Therefore, it is possible for a facility to be located outside of a fire protection district and to operate without adequate fire protection services.

The purpose of this amendment is to prompt large quantity generators of hazardous waste to identify the fire protection district responsible for providing fire protection services for their facility. This amendment would also serve as a tool for identifying those facilities that are not in a fire protection district and, thus, who would be responsible for developing their own fire protection plan as required by section 265.31 of the Regulations.

The Commission has evaluated the information presented at the rulemaking hearing, as well as the information in the Statement of Basis and Purpose. The Commission considers this information sufficient to justify adopting the proposed rule. The Commission finds that this rule is necessary to protect public health and the environment.

Amendment of § 100.21(d) (Permits By Rule – Generator Treatment)

The generator treatment requirements at § 100.21(d) of the Colorado Hazardous Waste Regulations are being amended at this time by modifying the wording of paragraph (d)(4) to be consistent with the land disposal restriction treatment requirements at § 268.7(a)(5) of the Regulations. The new paragraph (d)(4) would read as follows: § 100.21(d)(4) Develops a written waste analysis plan describing the procedures that will be carried out to accomplish treatment of the waste. The waste analysis plan must be based on a detailed chemical and physical analysis of a representative sample of the waste being treated and contain all of the information necessary to treat the waste.

The existing generator treatment requirements at 6 CCR 1007-3, § 100.21(d)(4) require a generator who conducts a generator treatment activity to submit a waste analysis plan and a notification to the Division at least 30-days prior to conducting the treatment. This requirement is inconsistent with the land disposal restriction treatment requirements at 6 CCR 1007-3, § 268.7(a)(5) that require a generator to maintain a copy of the waste analysis plan on-site. Additionally, notification is not required prior to conducting land disposal restriction treatment.

The purpose of this amendment is to make the generator treatment and land disposal restriction requirements consistent with regard to notification and development of a waste analysis plan.

Amendment of § 279.22 (Used Oil Storage)

Section 279.22 of the Colorado Hazardous Waste Regulations is being amended at this time by adding a new subparagraph (b)(3) to the Used Oil Storage requirements as follows: § 279.22(b)(3) Kept closed during storage, except when it is necessary to add or remove used oil, if the containers are being managed outdoors.

The existing Used Oil Storage requirements at 6 CCR 1007-3, § 279.22 do not require containers of used oil to be kept closed. Storing used oil outside in open containers increases the potential for environmental contamination resulting from spills and overfilling due to precipitation events.

The purpose of this amendment is to help minimize the release of used oil from containers that are being managed outdoors by requiring that the containers be kept closed, except when it is necessary to add or remove used oil.

The Commission has evaluated the information presented at the rulemaking hearing, as well as the information in the Statement of Basis and Purpose. The Commission considers this information sufficient to justify adopting the proposed rule. The Commission finds that this rule is necessary to protect public health and the environment.

Statement of Basis and Purpose - Rulemaking Hearing of October 18, 2005

8.58 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 261 is made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of Part 261, Appendix IX to Conditionally Delist F019 Hazardous Wastewater Treatment Sludge Generated by Golden Aluminum, Inc. located at 1405 East 14th Street in Fort Lupton, Colorado 80621

Appendix IX of Part 261 is being amended at this time to conditionally delist F019 hazardous waste generated from chemical conversion coating operations conducted on aluminum at the Golden Aluminum, Inc. facility in Fort Lupton, Colorado. This delisting will allow Golden Aluminum, Inc. to dispose of this waste at a solid waste landfill that meets the requirements of the Colorado Solid Waste Regulations (6 CCR 1007-2), provided it complies with the conditions of the delisting.

On August 16, 2005, the Hazardous Waste Commission (the "Commission") tentatively approved Golden Aluminum's petition to exclude or "delist" the F019 hazardous wastewater treatment sludge generated from chemical conversion coating operations conducted on aluminum at Golden Aluminum's facility located at 1405 East 14th Street in Fort Lupton, Colorado 80621. Pursuant to the provisions of § 25-15-302(2), C.R.S. and 6 CCR 1007-3, § 260.20(c), a public notice of the tentative decision to approve the delisting was published in the Colorado Register for written public comment. The public comment period closed on October 12, 2005. No comments were received. On October 18, 2005 the Commission voted to make its tentative decision final and approve Golden Aluminum's delisting petition. The delisting will become effective 20 days after publication in the Code of Colorado Regulations ("CCR") at 6 CCR 1007-3.

Golden Aluminum, Inc. operates a manufacturing facility in Fort Lupton, Colorado for the production of either "Bare" or "Coated" coiled aluminum sheet. One of the metal finishing operations conducted by this company is chemical etching of the aluminum sheet. Wastewater that is generated from this operation is treated on-site to remove heavy metals, which generates a wastewater treatment sludge that is classified as a F019 listed hazardous waste. The F019 hazardous waste listing in § 261.31 describes wastewater treatment sludge that is generated from chemical conversion coating operations conducted on aluminum.

Golden Aluminum, Inc. conducts a titanium conversion coating on aluminum. The treatment of rinse water from this process generates a wastewater treatment sludge that is regulated as an F019 listed hazardous waste.

The basis for each hazardous waste listing is described in Appendix VII of Part 261. Each listing is based on hazardous constituents that are generally contained in wastes described by the listing. The hazardous constituents that formed the basis for the F019 listing include hexavalent chromium and complexed cyanide.

Wastewater from the chemical conversion coating process is transferred to the facility's on-site wastewater treatment unit for treatment. The wastewater is initially stored in a 4,000-gallon holding tank and is then pumped to a mixing chamber where the pH is adjusted to 6.7 to 7.5 using sulfuric acid or caustic soda. The wastewater is then conveyed to a second mixing chamber where a flocculant is added to aid in the precipitation of heavy metals. The wastewater is then treated using dissolved air flotation (DAF). In the DAF unit, the solids are skimmed from the water using paddle wheels and then transferred to the sludge holding tank for dewatering in a sludge filter press forming the F019 sludge.

Analytical sampling of the F019 sludge was conducted prior to the submittal of the delisting petition. The chemical conversion coating process does not significantly change on a day-to-day basis, and the collected samples adequately represented the waste in question. The Hazardous Materials and Waste Management Division at the Colorado Department of Public Health and Environment (the Division), evaluated the sampling results and the request for petitioning of the waste in accordance with § 260.22. This evaluation was provided to the Commission.

The results of the waste sampling indicate that the waste did not contain detectable concentrations of hexavalent chromium or complexed cyanide. These chemicals form the basis for listing the F019 wastewater treatment sludge as a hazardous waste.

The results of the analysis also indicated that the waste contained detectable concentrations of arsenic, barium, trivalent chromium, and silver. However, based on health-based risk assessment calculations derived using the general assumptions outlined in the Division's current risk assessment policy, the waste did not contain concentrations of these constituents at levels which would be considered harmful to human health or the environment. Although arsenic was detected in the samples, the carcingenic risk associated with arsenic was found to be within the normal risk range of 1 in 10,000 (1 x 10-4) to 1 in 1,000,000 (1 x 10-6).

The potential for constituents in the waste to leach out and contaminate groundwater was evaluated by the Division using TCLP analytical tests that measure the maximum potential for constituents to be released from the waste. The results of the TCLP analysis indicated that arsenic, barium, chromium, and silver show only a very minor potential to leach out of the waste. However, as a condition of this delisting petition, all delisted sludge will be disposed in a solid waste landfill. Disposal in a solid waste landfill will ensure protection of human health and the environment from any metals contained in leachate that might migrate from the waste.

Further, the results of the waste sampling indicated that the waste sludge does not contain any organic constituents. Therefore, consideration of the potential health effects caused by exposure to organic constituents was not considered in evaluating the petition by the Division.

This delisting is being granted under conditions that specify disposal, record keeping, and storage requirements for the delisted sludge. Conditional delisting of the waste also prohibits any major changes to the chemical conversion coating process or wastewater treatment process without prior notification, evaluation, and approval by the Division.

This delisting does not apply to waste that demonstrates “significant changes” as defined in Delisting #007 in Part 261, Appendix IX--Wastes Excluded Under § 260.20 and § 260.22(d), or if any of the conditions specified in Part 261, Appendix IX for this delisting are not met. Should either of these occur, the waste is and must be managed as a hazardous waste. While the Commission has approved a conditional delisting for this specific waste at this specific site, the findings and criteria associated with the approval are unique. Other petitions for delisting, even if similar in material or use, will be reviewed by the Division and the Commission on a case-by-case basis.

Statement of Basis and Purpose - Rulemaking Hearing of November 15, 2005

8.59 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 264, 265 and 100 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Conforming Amendments to Implement Colorado's Environmental Covenant Statute, SB01-145

On July 1, 2001, the Colorado Environmental Covenant law, SB01-145, became law. This statute creates a mechanism for enforcing land and water use restrictions that are imposed in connection with environmental cleanup decisions. Frequently, remediation of environmental contamination does not eliminate all of the contaminants. Sometimes, engineered structures, such as caps or barrier walls are used to isolate residual contamination form the environment and human contact. Other times, a facility owner or operator may propose a "risk-based" cleanup, where contamination is cleaned up to levels that are safe for some exposure scenarios, but not others (e.g., a higher level of contamination is typically safe in industrial use scenarios than in residential use scenarios, because industrial use does not include exposures through activities such as gardening, children playing on the ground, etc.).

The environmental covenant law applies to remediation of environmental contamination and closure of regulated hazardous waste units under the Colorado Hazardous Waste Act. The existing hazardous waste regulations refer to instruments such as "deed notices" or "deed stipulations" in situations where the regulations require that use restrictions be imposed on property that has been used to manage hazardous wastes. One of the reasons for adoption of SB01-145 was that there is no Colorado case law or statute that indicates whether such instruments would be enforceable in the situations anticipated by the regulations. SB01-145 solved that problem by creating the enforceable environmental covenant.

The proposed amendments include changes to Parts 260 (adding a definition of environmental covenant), 264 and 265 (related to post-closure requirements and land treatment facilities) and Part 100 (related to information requirements for hazardous waste disposal sites).

The amendments to the regulations that are being adopted today are necessary to conform the regulations to the requirements of SB01-145, and to clarify how the covenant requirements fit in with existing regulatory requirements related to land use restrictions. These amendments do not expand the situations in which a covenant is required beyond those specified in the statute. In adopting SB01-145, the Legislature found that creating the mechanism of the environmental covenant was necessary for protection of human health and the environment (see § 25-15-317, C.R.S.). The Commission considers the legislative finding and adoption of SB01-145 as constituting substantial evidence to support its finding that the proposed regulatory amendments are necessary for protection of human health and the environment.

Correction of Typographical Errors and Inadvertent Omissions

These amendments correct typographical errors and inadvertent omissions that exist in § § 265.140(a), 265.140(a)(4)(vii) and 100.11(a)(2)(ii)(3) of the current regulations, and provide state equivalency with the applicable federal requirements.

Statement of Basis and Purpose - Rulemaking Hearing of March 21, 2006

8.60 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 265 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of § 265.52 (Content of contingency plan) and § 265.53 (Copies of contingency plan)

At its August 16, 2005 Hearing, the Hazardous Waste Commission adopted an amendment recommended by the Colorado Department of Public Health and Environment, Hazardous Materials Waste Management Division which added the following new paragraph (g) to section 265.52 of the Colorado Hazardous Waste Regulations: § 265.52(g) The plan must specify: (1) the fire protection district responsible for providing fire protection services to the facility, or (2) that the facility is not within a fire protection district but is operating under its own fire protection plan that has been approved by the Department.

The purpose of this amendment was to prompt large quantity generators of hazardous waste to identify the fire protection district responsible for providing fire protection services for their facility, and to serve as a tool for identifying those facilities that are not in a fire protection district and, thus, that would be responsible for developing their own fire protection plan as required by section 265.31 of the Regulations.

The Commission had received comments from the Colorado Emergency Planning Commission (CEPC) requesting that contingency plans also identify the applicable local emergency planning committee (LEPC) and that a copy of the contingency plan be provided to the LEPC. The Commission did not act on the requested change at its August hearing, but directed the Division staff to consult with the CEPC to draft a proposed amendment that achieved the CEPC's intention. This consultation occurred in August and September.

The CEPC and the Department believe, and the Commission agrees, that these amendments will improve protection of human health and the environment by improving the communication and coordination capabilities of LEPC's. LEPC's are an integral part of community response to emergency situations, and frequently assist local fire departments in responding to calls for assistance. Most counties and communities in the state have relatively small fire departments; many are volunteer fire departments. Mutual aid agreements among different jurisdictions are commonly used to improve response to emergency situations. The LEPC's facilitate local response in such situations, providing information to fire departments about hazardous materials or wastes that may be encountered at a given site. By ensuring that facilities are aware of which LEPC provides them services, and conversely, by ensuring the LEPC's are aware of facilities in their jurisdiction that have hazardous wastes on site, the amendments to the regulations will improve the emergency response capabilities of both local fire departments and the LEPC's themselves, resulting in benefits both to the facility and the surrounding community.

Accordingly, the Commission is hereby revising 6 CCR 1007-3, § 265.52(g) to read as follows: § 265.52(g) The plan must: (1) identify the fire protection district responsible for providing fire protection services to the facility, or state that the facility is not within a fire protection district but is operating under its own fire protection plan that has been approved by the Department, and (2) identify the local emergency planning committee for the area in which the facility is located.

The Commission is also amending 6 CCR 1007-3, § 265.53(b) to read as follows: § 265.53(b) Submitted to all local police departments, fire departments, hospitals, local emergency planning committees, and State and local emergency response teams that may be called upon to provide emergency services.

These amendments are more stringent than the federal requirements of 40 CFR § § 265.52 and 265.53. The Commission has evaluated the information presented at the rulemaking hearing, as well as the information in the Statement of Basis and Purpose. The Commission considers this information sufficient to justify adopting the proposed rule. The Commission finds that this rule is necessary to protect public health and the environment.

Statement of Basis and Purpose - Rulemaking Hearing of May 16, 2006

8.61 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 261, 262, 263, 264, 265, 279, 100 and 6 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendments to Hazardous Waste Fees

After three years under the present hazardous waste fee structure, the Department has determined that an increase in fees is necessary beginning in State Fiscal Year 2007, which begins on July 1, 2006. Legislation passed by the General Assembly in 2000 (SB 00-177) provided some general directives for implementation of the hazardous waste regulatory program, including guidance for future fee adjustments by the Hazardous Waste Commission.

The Department is authorized by U.S. EPA to operate the hazardous waste regulatory program in Colorado in lieu of the federal government. One of the key criteria evaluated by U.S. EPA in authorizing the state program is resources, both in terms of funding and in terms of qualified personnel. Without an increase in fee revenues, the Department has determined that it will not be able to operate an adequate program beginning in State Fiscal Year 2007.

The purpose of these amendments is to implement a balanced increase in hazardous waste program fees that the Department expects will provide adequate funding for the hazardous waste program for a period of approximately three years. This fee structure is expected to result in annual fees from TSD facilities that recoup approximately 29.7% of the Department's costs associated with TSD facilities, which complies with the 30% limit established by SB 00-177. Also, the annual fees from generator facilities is expected to recoup approximately 49.7% of the Department's costs associated with generators, which complies with the 50% limit established by SB 00-177. The adjusted fees are expected to increase the revenue from fees to the hazardous waste program by approximately 29% in state fiscal year 2007. When the funding provided by U.S. EPA is considered, the fee changes are expected to increase funds available to operate the hazardous waste program by approximately 14%.

These amendments incorporate the generator fees that were established by SB 00-177 into regulation.

The amendments being adopted at this time include the following:

a) General: Numerous non-substantive clarifications and corrections are being incorporated into Parts 261, 262, and Part 100. Substantive changes are explained in more detail below.

b) Amendment of Part 261: Section 261.5 of Part 261 is being amended to clarify that the Conditionally Exempt Small Quantity Generators (CESQGs) that are newly required to pay fees (see below for section 262.13) are also subject to the notification requirements of Part 99 (but not the notification fee being added to Section 100.33, explained below). These amendments are more stringent than the federal regulations, which do not require conditionally exempt generators to notify. The Commission has evaluated the information presented at the rulemaking hearing, as well as the information in the Statement of Basis and Purpose. The Commission considers this information sufficient to justify adopting the proposed rule. The Commission finds that this rule is necessary to protect public health and the environment.

c) Amendment of Part 262: Section 262.13 of Part 262 is being amended to:

1) Add a fee for CESQGs that generate certain waste codes. These waste codes (F001, F002, F005, and F005) represent the halogenated and non-halogenated solvents that are very high-priority wastes for the Division for several reasons: a) they are very common contaminants at our clean-up sites and are very mobile in the environment - they can quickly degrade large volumes of ground water; b) many are Class A carcinogens and are dangerous to human health; and c) they are commonly generated by business sectors that have poor compliance records. This fee is justified because of the increasing amount of time Division staff is investing in overseeing clean up of these wastes and ensuring compliant management of them at CESQGs;

2) Raise the fees for Small Quantity Generators (SQGs) from $390/year to $480/year; and

3) Raise the fees for Large Quantity Generators (LQGs) from $2,470/year to $3,050/year.

d) Amendment of Part 100.3:

1) Section 100.31(b)(1) is being amended to clarify that operating fees defined by waste volume will apply to all types of waste being treated or disposed at a facility in permitted hazardous waste management units. The full volume fee will apply to all hazardous wastes being treated or disposed at facilities in hazardous waste management units. A lesser fee ($5.00/ton) will apply to all non-hazardous wastes being treated or disposed in these units at only Class I facilities, except that no volume fee will apply to radioactive materials regulated by a radioactive materials license issued by the Department.

The Department is making this change because of changes beginning to occur in the waste management industry where, in order to remain competitive, facilities are expanding the types of services they provide specifically to non-hazardous waste clients. Unfortunately, at treatment and disposal facilities, the complexity of the operations and the level of oversight required by Department staff does not decrease when the facility manages non-hazardous waste. In fact, these facilities are busier processing more waste and our level of oversight increases as overall waste volume increases. It is important to note that most of the non-hazardous wastes handled by these facilities is relatively toxic and the generators are using these higher-cost facilities because of the risk and liability protection they provide.

The amendments are carefully designed such that the volume fee would not apply to storage of non-hazardous wastes at these facilities.

2) Section 100.31(b)(5) is being amended to clarify that up to five Solid Waste Management Units (SWMUs) can be included in one Environmental Covenant without increasing the $1,000/year fee.

3) The Annual Fee Table at the end of Section 100.31 is being amended to include an overall 35% increase in TSD fees. This applies to both the volume fees and the minimum fees for all classes of facilities.

4) The Annual Fee Table at the end of Section 100.31 is also being amended to include a 25% increase in Post-Closure fees, from $4,000/year/unit to $5,000/year/unit.

5) Section 100.32(a) is being amended to clarify that document review and activity fees will apply to Corrective Action Plans, Remedial Action Plans, and Environmental Covenants. All three of these document types are now extensively utilized by regulated entities and all are relatively new.

6) Section 100.32(b) is being amended to change the hourly rate for the document review and activity fee from $115/hour to $135/hour. The Department believes this increase is justified for three reasons:

   a. It is a "loaded" fee that recoups the cost of not only the technical staff performing the review, but also the proportional cost of direct management, direct administrative support, and direct IT support. It does not extend to Departmental overhead;

   b. The Division has documented that the "loaded" cost is actually $136/hour for 2005, slightly more than the proposed $135/hour; and

   c. The document review and activity fee was originally implemented in 1991 at a "loaded" rate of $85/hour. Inflating $85/hour through 2005 results in $139/hour, again slightly more than the proposed $135/hour.

7) The Document Review and Activity Fee Table at the end of Section 100.32 is being amended by increasing the ceiling fees for Class III facilities from $17,000 to $30,000 for the first unit and from $8,500 to $15,000 for every unit thereafter. The reason for this proposed change is that Class III facilities include storage facilities and some of the storage permits in Colorado are fairly lengthy and sophisticated. As these permits come up for renewal, it has been very difficult for Department staff to stay within the old ceiling fees and deliver a quality product.

8) Section 100.33 is being added to the regulations. This section creates a new $100 one-time fee for certain types of hazardous waste notifications:

   a. Notifications where a facility is lowering its generator status; and

   b. New notifications for SQGs and LQGs, but not for CESQGs.

   This fee is intended to be a cost recovery fee for Department staff time spent processing the new or revised notifications. It is similar to processing fees charged by other Departmental programs.

Uniform Hazardous Waste Manifest Rule

These amendments revise Parts 260, 261, 262, 263, 264 and 265 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) to correspond to the federal amendments to the Uniform Hazardous Waste Manifest regulations promulgated by the Environmental Protection Agency (EPA) and published in the Federal Register on March 4, 2005 (70 FR 10776-10825), and as amended on June 16, 2005 (70 FR 35034-35041).

These amendments provide state equivalency with the federal provisions that revised the Uniform Hazardous Waste Manifest regulations and the manifest and continuation sheet forms used to track hazardous waste from a generator's site to the site of its disposition. These revisions standardize the content and appearance of the manifest form (EPA Form 8700-22) and continuation sheet (EPA Form 8700-22A). These amendments also make these forms available from a greater number of sources and adopt new procedures for tracking certain types of waste shipments with the manifest. These shipments include hazardous wastes that destination facilities reject, waste consisting of residues from non-empty hazardous waste containers, and wastes entering or leaving the United States.

The revisions to the federal manifest requirements lie under joint RCRA and US Department of Transportation Hazmat authority. Hazmat law requires consistency in hazardous materials shipping papers, such as manifests. Consequently, States are required to adopt state analogs to the revised manifest form and associated requirements of the federal rule, regardless of whether the Federal changes could be considered more or less stringent than the existing requirements. The Federal rule will be implemented uniformly on the delayed compliance date of September 5, 2006, regardless of the RCRA State authorization status of individual States. During this transition period, the existing manifest forms and requirements will continue to be implemented.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations that were published in the Federal Register at 70 FR 10776-10825, March 4, 2005, and as amended at 70 FR 35034-35041, June 16, 2005.

Nonwastewaters from Dyes and Pigments

These amendments add hazardous nonwastewaters generated from the production of certain dyes, pigments, and food, drug and cosmetic colorants to the list of RCRA hazardous wastes from specific sources in 6 CCR 1007-3, § 261.32, with the hazardous waste code number K181.

The K181 listing establishes annual mass loading levels for seven constituents of concern (aniline, o-anisidine, 4-chloroaniline, p-cresidine, 2,4-dimethylaniline, 1,2-phenylenediamine, and 1,3-phenylenediamine). Wastes that exceed the limits must be regulated as hazardous waste, unless they are disposed in certain landfills or treated by certain combustion units. These amendments also establish land disposal restrictions (LDR) standards for the newly listed waste.

The amendments being adopted at this time include:

1) Revising the table at § 261.32 to add the K181 listing:

   K181 - Nonwastewaters from the production of dyes and/or pigments (including nonwastewaters commingled at the point of generation with nonwastewaters from other processes) that, at the point of generation, contain mass loadings of any of the constituents identified in paragraph (c) of this section that are equal to or greater than the corresponding paragraph (c) levels, as determined on a calendar year basis. These wastes will not be hazardous if the nonwastewaters are: (i) disposed in a Subtitle D landfill unit subject to the design criteria in § 258.40, (ii) disposed in a Subtitle C landfill unit subject to either § 264.301 or § 265.301, (iii) disposed in other Subtitle D landfill units that meet the design criteria in § 258.40, § 264.301, or § 265.301, or (iv) treated in a combustion unit that is permitted under Subtitle C, or an onsite combustion unit that is permitted under the Clean Air Act. For the purposes of this listing, dyes and/or pigments production is defined in paragraph (b)(1) of this section. Paragraph (d) of this section describes the process for demonstrating that a facility's nonwastewaters are not K181. This listing does not apply to wastes that are otherwise identified as hazardous under § § 261.21-261.24 and 261.31-261.33 at the point of generation. Also, the listing does not apply to wastes generated before any annual mass loading limit is met.

2) Adding specific definitions for the K181 listing at § 261.32(b) of the regulations;

3) Adding a table with the listing levels for the seven constituents of concern in K181 wastes at § 261.32(c) of the regulations;

4) Adding procedures for demonstrating that dyes and/or pigment nonwastewaters are not K181 waste at § 261.32(d) of the regulations;

5) Adding the seven constituents of concern that are the basis for the K181 waste listing to Appendix VII of Part 261;

6) Adding the five constituents of concern (o-anisidine, p-cresidine, 2,4-dimethylaniline, 1,2-phenylenediamine, and 1,3-phenylenediamine) for the K181 listing that were not already listed in Appendix VIII of Part 261 to Part261, Appendix VIII;

7) Revising § 261.4(b)(15) of the regulations to provide a temporary, conditional exemption from the definition of hazardous waste for leachate and gas condensate generated at landfills used for the disposal of K181 waste prior to the effective date of the K181 listing;

8) Establishing LDR treatment standards for the newly listed K181 waste in § 268.20 and § 268.40 of the regulations;

9) Revising the listing for F039 in the table of LDR treatment standards at § 268.40 to include those K181 constituents that are not already identified as regulated constituents on F039; and

10) Establishing universal treatment standards (UTS) levels in the table at § 268.48 of the regulations for o-anisidine, p-cresidine, 2,4-dimethylaniline, and 1,3-phenylenediamine. (**Note:** UTS levels already exist in the table at § 268.48 for aniline and 4-chloroaniline. UTS levels were not set for the remaining K181 constituent of concern, 1,2-phenylenediamine, since it does not have numerical treatment standards).

These amendments are more stringent than the existing state requirements. In order to maintain its authorization to operate its state program in lieu of the U.S. Environmental Protection Agency operating a federal program, Colorado must adopt state requirements equivalent to and consistent with the overlying federal requirements. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

This Basis and Purpose incorporates by reference the preamble language for the Environmental Protection Agency regulations that were published in the Federal Register at 70 FR 9138-9180, February 24, 2005, and as amended at 70 FR 35032-35034, June 16, 2005.

Correction of Typographical Errors and Inadvertent Omissions

These amendments correct typographical errors and inadvertent omissions that exist in § 261.21(a)(3), Appendix VII to Part 261, Appendix VIII to Part 261, § 264.52(b), § 265.52(b), § 265.302(b), Appendix VI to Part 265, the table of treatment standards for hazardous waste at § 268.40, and § 279.52(b)(2)(ii) of the current regulations, and provide state equivalency with the applicable federal requirements.

Amendment of § 6.04

Section 6.04 is being amended by revising paragraph (a) to reflect the annual Commission fees to be assessed for fiscal year 2006-2007.

Statement of Basis and Purpose – Rulemaking Hearing of September 19, 2006

8.62 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 261, 262, 265, and 100 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of § § 261.5 and 262.13 (de minimis CESQG Generation Rates)

At the May 16, 2006 rulemaking hearing regarding changes to the hazardous waste fee structure, the Hazardous Waste Commission expressed concerns related to the new notification and fee requirements for Conditionally Exempt Small Quantity Generators (CESQGs) of hazardous waste that generated very small amounts of waste. The Commission asked HMWMD (Division) staff to review available information and make a proposal for a level of waste generation below which the notification and fee requirements would not apply.

This rulemaking proposes that the level of hazardous waste generation below which a CESQG that generates F001, F002, F004, and F005 would not be subject to the notification or fee requirements be 3 gallons/year. This is equivalent to about 25 pounds/year, or slightly less than 12 kilograms/year of liquid waste, depending on the waste's specific gravity. The amount of 3 gallons/year represents an average waste generation rate of 1 quart/month, but allows waste generators some flexibility and variance from the average rate throughout a calendar year.

As stated in the May 16, 2006 Statement of Basis and Purpose, the Division is concerned about the F001, F002, F004, and F005 wastes because of their toxicity, prevalence at contaminated sites, and the low compliance rates in business sectors that commonly generate these wastes. The Division also stated at the May hearing that the intended targets of the notification and fee requirements were business users that consistently generate volumes of these wastes large enough to significantly affect public health and/or the environment, not the very small quantity users that may occasionally have need for small solvent volumes. The Division believes that a generation rate of 3 gallons/year of F001, F002, F005, and F005 hazardous waste provides an easily measured and convenient limit that will allow the very small generators, such as building maintenance operations, schools, and art studios, to be exempt from the notification and fee requirements. It provides the exemption in gallons and quarts, rather than metric units used elsewhere in the regulations, because they are widely understood and easily measured or estimated. Based on the Division's experience, the large majority of businesses generating these waste streams in the problematic business sectors, such as dry cleaners, automotive shops, printers, and specialty paint shops, exceed this amount and will remain subject to the notification and fee requirement. This aligns with the Division's intent and removes the HW Commission's concern.

The amendments being adopted at this time include the following:

a) Amendment of Part 261: Section 261.5 of Part 261 is being amended by adding the 3 gallon/year lower limit for the notification requirement. With this amendment, CESQGs generating less than 3 gallons/year of F001, F002, F004, and F005 would not have to submit a hazardous waste notification.

b) Amendment of Part 262: Section 262.13 of Part 262 is being amended by adding the 3 gallon/year lower limit for the fee requirement. With this amendment, CESQGs generating less than 3 gallons/year of F001, F002, F004, and F005 would not have to pay the annual fee of $100.

These amendments are more stringent than the federal regulations, which do not require conditionally exempt small quantity generators to notify or pay an annual generator fee. The Commission has evaluated the information presented at the rulemaking hearing, as well as the information in the Statement of Basis and Purpose. The Commission considers this information sufficient to justify adopting the proposed rule. The Commission finds that this rule is necessary to protect public health and the environment.

Amendment of § 262.34(a)(2) (Tracking Accumulation Time for Tanks)

Section 262.34(a)(2) of the Colorado Hazardous Waste Regulations (6 CCCR 1007-3) is being amended at this time to specify that the accumulation start date must be marked on both tanks and containers as follows:

§ 262.34(a)(2) The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container and either on or attached to each tank, or on a tank log sheet that is maintained at the facility and available for inspection upon request.

The existing regulations at § 262.34(a)(2) only address the marking requirement for accumulation of hazardous waste in containers, and do not require a generator who accumulates hazardous waste in a tank or tank system to mark the accumulation start date on the tank. This is inconsistent with the requirements for other accumulation units, and makes it difficult for inspectors to verify that the on-site accumulation limit has been met.

The purpose of this amendment is to help ensure that generators track the accumulation time for 90 or 180-day accumulation tanks so that waste is not accumulated in excess of the on-site accumulation time period. Modifying this regulation also ensures consistency with the requirement to track the accumulation start date for hazardous waste managed in containers, drip pads, and containment buildings.

This amendment is more stringent than the federal regulations, which do not require a generator who accumulates hazardous waste in a tank or tank system to mark the accumulation start date on the tank or in a tank log sheet. The Commission has evaluated the information presented at the rulemaking hearing, as well as the information in the Statement of Basis and Purpose. The Commission considers this information sufficient to justify adopting the proposed rule. The Commission finds that this rule is necessary to protect public health and the environment.

Amendment of § 265.192 (Tank Requirements)

Section 265.192 of the Colorado Hazardous Waste Regulations is being amended at this time to prohibit a large quantity generator of hazardous waste from storing hazardous waste in open top tanks.

Section 265.192 is being revised by adding paragraph (h) as follows:

§ 265.192(h) Hazardous waste may not be accumulated in open top tanks.

Part 265, Subpart CC, Air Emission Standards applicable to emissions from tanks, surface impoundments and containers, precludes the storage of hazardous waste with an average volatile organic concentration of 500 parts per million by weight in a tank that is open to the environment. However, there is no current requirement in the regulations prohibiting use of open-top tanks for storing non-organic hazardous wastes.

The purpose of this amendment is to ensure protection of human health and the environment by minimizing potential releases of hazardous waste from overfills and overtopping of tanks from weather, as well as preventing evaporation of waste. The organic air emission regulations already prohibit the accumulation of organic hazardous waste in tanks that are not covered and free of gaps and cracks.

This amendment is more stringent than the federal regulations, which do not preclude the storage of non-organic hazardous waste in open top tanks. The Commission has evaluated the information presented at the rulemaking hearing, as well as the information in the Statement of Basis and Purpose. The Commission considers this information sufficient to justify adopting the proposed rule. The Commission finds that this rule is necessary to protect public health and the environment.

Amendment of § 100.32 (Effective Date of Permits)

Section 100.32 of the Colorado Hazardous Waste Regulations is being amended at this time to make State RCRA permits effective thirty (30) days after being issued, irrespective of whether the associated fees have been paid.

Section 100.32(d) is being revised as follows:

§ 100.32 (d) Payment.

(1) *Facilities subject to regulation under Parts 264 or 265 of these regulations shall provide timely payment of the document review and activity fee upon billing by the Department on a quarterly basis or upon another basis as determined by the Director. For purposes of this section, "timely payment" means within thirty days of receipt of the Department's billing, or other time frame approved in writing by the Director. Payment shall be made to the Treasurer of the State of Colorado, which monies shall be credited to the Hazardous Waste Service Fund. A late payment fee of 2% per month or portion thereof shall be assessed on any unpaid balance subject to the limitations of § 24-79.5-101, et seq. C.R.S.*

(2) *Failure to make timely payment of any document review and activity fee is a cause for termination of a permit as described in § 100.64.*

The purpose of §100.32(d) is to ensure timely payment of document review and activity fees at permitted facilities. The portions of this section proposed for deletion were intended to incentivize payment of the fees by allowing the Department to delay a permit effective date until fees were paid. However, the wording of this section did not accomplish this incentive, but rather could have prevented the Department from making a permit effective until a recalcitrant facility had paid their fees. Since the requirement that the effective date occur 30 days after permit issuance is also included in the regulations at §100.511(b), the Division believes deleting the proposed section in §100.32(d) improves the useability and accuracy of the regulations.

Statement of Basis and Purpose – Rulemaking Hearing of December 12, 2006

8.63 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 261 and 262 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of § § 260.10, 261.5(b) and 262.43 (Requirement for Submittal of Self-Certification Information)

Sections 261.5(b) and 262.43 of the Colorado Hazardous Waste Regulations (6 CCCR 1007-3) are being amended at this time to require generators of hazardous waste, including conditionally exempt small quantity generators (CESQGs), to complete and return a self-certification compliance checklist upon request to do so by the Division. A definition of a "Self-Certification Checklist" is also being added to § 260.10 of the Regulations.

The Division is in the process of implementing a self-certification program, which requires certain generators of hazardous waste to complete and return a self-certification compliance checklist. These checklists are the key element of the self-certification program and track a facility's compliance with the hazardous waste regulations.

The self-certification project, also known as the Environmental Results Program, is intended to build awareness within the regulated community of the applicable regulatory requirements by asking facilities to periodically review the requirements and certify that they are in compliance. This approach has many important advantages: 1) it is a very efficient method for improving compliance rates within our large universe of small and conditionally exempt generators, thus helping to level the economic playing field; 2) it allows precise targeting of follow-up compliance assistance; 3) it allows better targeting of enforcement by helping identify potentially recalcitrant, out-of-compliance facilities; and 4) it serves as a periodic refresher for facility personnel on applicable requirements. In the pilot self-certification projects already conducted by the Division, feedback from the regulated community has consistently been positive – they like the program, the effort is not burdensome, and the benefits are high.

Experience with the program to date has demonstrated that it is much more effective if it is clear to the generator that completing and returning the form is mandatory, not voluntary. Therefore, to ensure that the self-certification process is effective and efficient, the proposed amendments establish mandatory requirements. Sections 25-15-302(2)(g) and 25-15-302(2)(k)(VI) provide authority sufficiently broad to require generators to complete and return self-certification checklists. Section 25-15-310 provides penalties for omitting material information or making false material statements in any reports or other documents filed to comply with requirements of the Act or implementing regulations.

These amendments are more stringent than the federal regulations, which do not require generators of hazardous waste to complete and return a self-certification checklist. The Commission has evaluated the information presented at the rulemaking hearing, as well as the information in the Statement of Basis and Purpose. The Commission considers this information sufficient to justify adopting the proposed rule. The Commission finds that this rule is necessary to protect public health and the environment.

Statement of Basis and Purpose - Rulemaking Hearing of May 15, 2007

8.64 Basis and Purpose.

These amendments to 6 CCR 1007-2, Part 3 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Inspection of Off-Site Hazardous Waste Disposal Sites

These amendments to 6 CCR 1007-2, Part 3 revise the inspection frequency for the Department's inspection of off-site hazardous waste disposal sites. As specified in Section 25-15-209.5, C.R.S., such inspection shall be conducted at intervals determined by rule and regulation of the Commission based on the volume and toxicity of the wastes being received. The State's only hazardous waste disposal facility is the Clean Harbors Deer Trail LLC facility (formerly Highway 36 Land Development Company.)

The existing regulations require the Department to conduct inspections of off-site hazardous waste facilities a minimum of once per month and potentially four times a month based on volume of waste received. Experience has demonstrated that inspection frequency based on volume of waste received does not provide an effective or efficient benefit to human health or the environment. The volume of waste received at the facility has increased at times over the years. However, the types and toxicity of the waste received at the facility has not changed. In fact, some of the wastes received at the facility are high volume-low toxicity wastes that require very routine and simple waste handling. The current regulations do not allow the Division to account for these high volume-low toxicity wastes in conducting inspections. These amendments proposed here require the Department to inspect the facility once a month regardless of volume or toxicity of the wastes received at the facility, but allows flexibility for additional inspections. The Department is committed and will continue to inspect the facility more frequently if the type of wastes received, the type of waste management activities, compliance history, or findings of previous inspections warrant a greater frequency.

Statement of Basis and Purpose - Rulemaking Hearing of May 15, 2007

8.64 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 261, 264, 265 and 100 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

RCRA Burden Reduction Initiative Amendments

These amendments reduce the paperwork burden imposed on the Department and the regulated community by the existing RCRA recordkeeping and reporting requirements in the Colorado Hazardous Waste Regulations (6 CCCR 1007-3). These amendments will help to streamline the information collection requirements, ensuring that only the information that is actually needed and used to implement the RCRA program is collected, while retaining the Department's mission of protecting human health and the environment.

The amendments being adopted at this time include the following:

a. Changes to the amount of time records must be kept.

1. Changing a number of the operating record requirements under § § 264.73 and 265.73 to reduce the record retention time to five years.

2. Amending § 265.73(b)(6) and creating a new § 265.73(b)(15) to require retention in the operating record until closure of the facility, the ground-water quality assessment reports required under § 265.90 and § 265.93(d)(2), and ground-water quality assessment reports required under § 265.93(d)(5).

3. Establishing a five-year record retention time for information kept on the operation of incinerators, boilers, and industrial furnaces.

b. Option to follow the Integrated Contingency Plan Guidance. We are amending § § 264.52(b) and 265.52(b) to provide owners and operators of hazardous waste treatment, storage and disposal facilities the option of developing one contingency plan. The Department recommends that the plan be based on the Integrated Contingency Plan Guidance, which can be found at 61 FR 28641, June 5, 1996 or on the Internet at http://www.epa.gov/OEM/oem_guidance.htm

c. Elimination of obsolete regulatory language in § § 264.193, 264.251, 265.193, 265.221 and 265.301 of the regulations that are no longer applicable or have an expiration date that has passed.

d. Elimination of selected recordkeeping and reporting requirements.

1. Eliminating the requirement in § 264.342(b)(3) to notify the Department of the facility's intent to burn F020, F021, F022, F023, F026, and F027 wastes.

2. Eliminating the requirement in § § 264.1061(b)(1) and (d), and 265.1061(b)(1) and (d) of the regulations for facilities to notify the Department if they employ or discontinue use of the alternative valve standard.

2. Eliminating the requirement in § § 264.1062(a)(2) and 265.1062(a)(2) for facilities to submit a notification to the Department before implementing one of the alternative valve work practices specified in § § 264.1062(b)(2) and (3), and 265.1062(b)(2) and (3) of the regulations.

e. Permitting decreased inspection frequency for certain hazardous waste management units.

1. Establishing weekly inspection requirements in § § 264.195 and 265.195 for certain hazardous waste tank systems at permitted and interim status facilities and at large quantity generator sites.

2. Establishing weekly inspection requirements in § 265.201 for small quantity generator (SQG) hazardous waste tank systems with secondary containment.

3. Allowing members of the Colorado Environmental Leadership and EPA Performance Track programs to apply for an adjustment to the frequency of inspections for certain hazardous waste units and areas (See amendments to § § 260.10, 264.15(b)(4), 264.15(b)(5), 264.174, 264.195, 264.1101(c)(4), 265.15(b)(4), 265.15(b)(5), 265.174, 265.201, and 265.1101(c)(4).

f. Removal of the requirement in § 261.4(a)(10)(iii)(E) to submit a one-time notification for recycled wood wastewaters and spent wood-preserving solutions.

g. Changes to the requirements for document submittal

1. Streamlining the procedure in § 260.31(b)(2) for obtaining a variance from classification as a solid waste.

2. Streamlining the requirements in § § 264.98(d), 264.98(g)(2) & (3), 264.99(f) and 264.99(g) for ground-water monitoring.

These amendments are equivalent to, or less stringent than the existing provisions, and Colorado is not required to adopt these provisions. Nevertheless, the Department believes that these amendments will provide significant benefits to the Department and the regulated community, without compromising human health or environmental protection.

This Basis and Purpose incorporates by reference the applicable preamble language for the Environmental Protection Agency regulations that were published in the Federal Register at 71 FR 16862-16915, April 4, 2006 for which state analogs are being adopted at this time.

Statement of Basis and Purpose – Rulemaking Hearing of May 15, 2007

8.64 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 6 is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-314(1), C.R.S.

Amendment of § 6.04

Section 6.04 is being amended by revising paragraph (a) to reflect the annual Commission fees to be assessed for fiscal year 2007-2008.

Statement of Basis and Purpose - Rulemaking Hearing of August 21, 2007

8.65 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 273 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Part 273 Mercury-Containing Devices Amendments

On November 21, 2000, Colorado adopted state regulations for the management of hazardous waste mercury-containing devices under Part 273 of the Colorado Hazardous Waste Regulations (6 CCCR 1007-3).

On August 5, 2005, the Environmental Protection Agency ("EPA") issued a final rule adding mercury-containing equipment to the federal list of universal wastes regulated under the standards for universal waste management found at 40 CFR Part 273.

The adoption of these amendments to Colorado's Part 273 Universal Waste Management Standards are minor conforming changes necessary to maintain state equivalency to and provide consistency with the federal requirements.

The amendments being adopted at this time include the following:

a. Revising the applicability standards for mercury-containing devices at § 273.2 of the Regulations;

b. Adding a definition of "ampule", and revising the definition of "Large Quantity Handler of Universal Waste" in § 273.9 of the Regulations;

c. Revising the waste management standards for small quantity handlers of universal waste mercury-containing devices in § 273.13(c) of the Regulations;

d. Revising the labeling/marking requirements for universal waste mercury-containing thermostats at § 273.14 of the Regulations for small quantity handlers of universal waste;

e. Modifying the notification requirements of large quantity handlers of universal waste at § 273.32 of the Regulations;

f. Revising the waste management standards for large quantity handlers of universal waste mercury-containing devices in § 273.33(c) of the Regulations; and

g. Revising the labeling/marking requirements for universal waste mercury-containing thermostats at § 273.34 of the Regulations for large quantity handlers of universal waste;

This Basis and Purpose incorporates by reference the applicable preamble language for the Environmental Protection Agency regulations that were published in the Federal Register at 72 FR 45508-45522, August 5, 2005.

Statement of Basis and Purpose - Rulemaking Hearing of August 21, 2007

8.65 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 279 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Part 279 Used Oil Amendments

These amendments revise sections 279.1, 279.24(a)(3), 279.31(b) and 279.81(b) of Colorado's Part 279 Standards for the Management of Used Oil.

The amendments being adopted at this time include the following:

a. Revision of the definition of "Used oil collection center" in § 279.1: Section 279.1 of the Colorado Hazardous Waste Regulations is being amended at this time by revising the definition of a Used Oil Collection Center to require notification to the Department using the Colorado Hazardous Waste Notification form. This requirement is not considered to be more stringent than the federal requirements because the existing definition already required that a used oil collection center be "registered/licensed/permitted/recognized by a state/county/municipal government to manage used oil ..." At this time, there is no uniform means for a used oil collection center to be registered, licensed, permitted or recognized by a state, county or municipal government. The purpose of this amendment is to assist used oil collection centers by providing a recognized statewide mechanism for notification and recognition. Notification will also provide a means for used oil generators regulated under Subpart C of Section 279 and household do-it-yourselfers to identify legitimate used oil collection centers.

b. Revision of § 279.24(a)(3): Section 279.24(a)(3) of the Colorado Hazardous Waste Regulations regarding off-site shipments of used oil is being amended at this time by incorporating the notification requirement as included in the revised definition of a used oil collection center in order to remain consistent with the definition.

c. Revision of § 279.31(b)(2): Section 279.31(b)(2) of the Colorado Hazardous Waste Regulations regarding used oil collection centers is being amended at this time by incorporating the notification requirement as included in the revised definition of a used oil collection center in order to remain consistent with the definition.

d. Addition of § 279.31(b)(3): A new Section 279.31(b)(3) is being added to the Colorado Hazardous Waste Regulations regarding used oil collection centers to reiterate the limits on the burning of used oil in a space heater at a used oil collection center to used oil generated by the owner or operator of the collection center or used oil brought to the collection center by household do-it-yourselfers. Inclusion of this new section is necessary because some owner/operators of used oil collection centers may not understand the regulatory distinction between being the generator of used oil and generally meeting the requirements for a generator of used oil. This distinction is important in that Section 279.23 specifies that used oil burned in an on-site space heater must be used oil that the owner or operator generates or used oil received from household do-it-yourselfers. This amendment also allows used oil that has been determined to meet the used oil fuel specifications in Section 279.11 to be burned in the space heater as long as the person making that determination complies with applicable standards for used oil fuel marketers in Subpart H of Part 279.

e. Revision of § 279.81(b): Section 279.81(b) of the Colorado Hazardous Waste Regulations regarding disposal of nonhazardous used oil is being amended at this time to require that the disposal of nonhazardous used oils that cannot be recycled be disposed of in accordance with the state regulations pertaining to solid waste sites and facilities in 6 CCR 1007-2 rather than the federal requirements in 40 CFR Parts 257 and 258. At this time, the requirements for disposal of nonhazardous used oil are the same under both regulatory programs. This change is being made in order to keep the state hazardous waste regulations consistent with the state solid waste regulations should any changes become necessary in the future. Any future changes to the state solid waste regulations that are more stringent than the federal requirements of 40 CFR Parts 257 and 258 regarding the management of nonhazardous liquid wastes will have to be reviewed in the context of indirectly making the state hazardous waste regulations more stringent than the federal hazardous waste regulations.

Statement of Basis and Purpose - Rulemaking Hearing of February 19, 2008 [Eff 03/30/2008]

8.66 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 261 is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of § 261.5 Special Requirements for Conditionally Exempt Small Quantity Generators.

Section 261.5 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) is being amended at this time to require conditionally exempt small quantity generators (CESQGs) of hazardous waste to maintain and operate their facilities in a manner to minimize the possibility of a release.

While the current regulations require large quantity generators (LQGs) and small quantity generators (SQGs) of hazardous waste to operate their facilities in a manner to minimize the possibility of a release of hazardous waste or hazardous waste constituents that could threaten human health or the environment, CESQGs are not currently required to meet this same standard. This inconsistency in the regulations provides no incentive for CESQGs to properly manage their hazardous waste and potentially provides CESQGs with an economic advantage over SQGs and LQGs.

The Commission has evaluated the information presented at the rulemaking hearing, as well as the information in the Statement of Basis and Purpose. The Commission considers this information sufficient to justify adopting the proposed rule. The Commission finds that this rule is necessary to protect public health and the environment.

Statement of Basis and Purpose - Rulemaking Hearing of February 19, 2008 [Eff 03/30/2008]

8.66 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 262 is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of § 262.34(d)(5)(iii): Training Requirements for Small Quantity Generators

Section 262.34 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) is being amended at this time by revising the current language of paragraph (d)(5)(iii) to require documentation of training for small quantity generators (“SQGs”) of hazardous waste, and to make the training requirement for SQGs performance-based, as is the case for large quantity generators of hazardous waste.

Pursuant to the existing training requirements of 6 CCR 1007-3, Section 262.34(d)(5)(iii), a hazardous waste generator must ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures, relevant to their responsibilities, during normal facility operations and emergencies. A SQG of hazardous waste is currently not required to maintain records of training. The definition of “thoroughly familiar” is subject to interpretation, and without documentation of training, it is not always apparent that adequate training has been provided to facility personnel.

The purpose of this amendment is to clarify the training requirements applicable to a SQG of hazardous waste. Although this amendment will add some additional recordkeeping requirements for the SQG, clarifying the SQG training requirements should make compliance with the regulations easier for the generator, and will simplify verification of the generator’s compliance with the training requirements by the Division.

The Commission has evaluated the information presented at the rulemaking hearing, as well as the information in the Statement of Basis and Purpose. The Commission considers this information sufficient to justify adopting the proposed rule. The Commission finds that this rule is necessary to protect public health and the environment.

Statement of Basis and Purpose - Rulemaking Hearing of February 19, 2008

8.66 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 265 is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of § 265.52: Identification of Accumulation Areas in the Contingency Plan

Section 265.52 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) is being amended at this time by adding paragraph (h) requiring that the location of all hazardous waste accumulation areas at a facility be included in the facility's contingency plan.

Pursuant to the existing accumulation requirements of 6 CCR 1007-3, Section 262.34(c), a hazardous waste generator is only required to list accumulation areas in the facility's contingency plan if the facility maintains satellite accumulation areas. A large quantity generator of hazardous waste that does not maintain satellite accumulation areas of hazardous waste would not be required to identify the location of the facility's hazardous waste accumulation areas, including the facility's 90-day storage area(s) in the facility's contingency plan.

The purpose of this amendment is to clarify that the location of all hazardous waste accumulation areas at a facility are required to be identified in the facility's contingency plan.

The Commission has evaluated the information presented at the rulemaking hearing, as well as the information in the Statement of Basis and Purpose. The Commission considers this information sufficient to justify adopting the proposed rule. The Commission finds that this rule is necessary to protect public health and the environment.

Statement of Basis and Purpose - Rulemaking Hearing of February 19, 2008

8.66 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 265 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of § 265.174: Scope of Weekly Inspections, and Corrective Action Requirements for Deficiencies Identified During the Inspection.

Section 265.174 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) is being amended at this time by:

a. Revising the regulatory requirement for conducting weekly inspections of areas where containers are accumulated to require a thorough inspection of the containers to ensure that all of the Part 265, Subpart I requirements regarding the use and management of containers and the applicable container labeling requirements of § 262.34 are being met; and

b. Adding paragraph (b) to § 265.174, requiring that problems identified during the weekly inspections are remedied in accordance with § 265.15(c) of the regulations.

Pursuant to the existing container inspection requirements of 6 CCR 1007-3, Section 265.174, a hazardous waste generator is not required to evaluate anything other than looking for leaking or deteriorated containers during the weekly inspection; does not have to maintain documentation of the weekly inspection; and is not required to correct the problems encountered during the weekly inspections.

The purpose of these amendments is to ensure that thorough inspections are being conducted; that issues related to compatibility, container closure, and management of ignitable and reactive wastes are checked at least weekly; and that problems identified during the weekly inspections are corrected in a timely manner.

The Division currently recommends, as a best management practice, that generators maintain a written log of the weekly inspections so that compliance with the inspection requirement can be easily demonstrated by the facility. Colorado Environmental Leadership and EPA Performance Track member facilities may also qualify for a reduced inspection frequency of at least once each month, upon written approval by the Department.

The Commission has evaluated the information presented at the rulemaking hearing, as well as the information in the Statement of Basis and Purpose. The Commission considers this information sufficient to justify adopting the proposed rule. The Commission finds that this rule is necessary to protect public health and the environment.

Statement of Basis and Purpose - Rulemaking Hearing of May 20, 2008

8.67 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 6 is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-314(1), C.R.S.

Amendment of § 6.04 Annual Commission Fee

Section 6.04 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) is being amended at this time by revising paragraph (a) to reflect the annual Commission fee to be assessed for fiscal year 2008-2009.

Statement of Basis and Purpose - Rulemaking Hearing of August 19, 2008

8.68 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 261, Appendix IX is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Removal of Delisting #002 in Part 261, Appendix IX

The Solid and Hazardous Waste Commission is hereby removing the conditional delisting granted to NTI, a division of Colorado Springs Circuits, Inc. (“NTI”), for its facility located at 6035 Galley Road in Colorado Springs, Colorado (the “Facility”).

NTI was granted a conditional delisting by the Commission on August 20, 1996 for wastewater treatment sludge (F006 hazardous waste) generated from electroplating operations at the Facility.

The delisting was granted under conditions that specified sampling, storage, recordkeeping and disposal requirements for the delisted sludge. The conditional delisting of the F006 waste also prohibited any major changes to the electroplating process or wastewater treatment process at the Facility without prior notification, evaluation, and approval by the Division.

In January of 2000, Dynamic Details, Inc. (“DDI”), formally known as NTI, announced its plans to consolidate its pre-production manufacturing operations located at the Facility into its Dallas, Texas operation, which would result in the complete closure of the Colorado Springs facility.

On June 20, 2000, the Division received formal notice indicating that DDI officially ceased operations at the Facility on December 31, 1999, and had completed all closure activities at the Facility as of May 18, 2000. Therefore, NTI's August 1996 conditional delisting is no longer applicable, and the Commission is removing the delisting.

Removal of Delisting #7 in Part 261, Appendix IX

The Solid and Hazardous Waste Commission is hereby removing the conditional delisting granted to the Golden Aluminum, Inc. ("Golden Aluminum") facility in Fort Lupton, Colorado (the "Facility").

Golden Aluminum was granted a conditional delisting by the Commission on October 18, 2005 for wastewater treatment sludge (F019 hazardous waste) generated from aluminum cleaning and conversion coating operations at the Facility.

The delisting was granted under conditions that specified disposal, recordkeeping, and storage requirements for the delisted sludge. The conditional delisting of the F019 waste also prohibited any major changes to the chemical conversion coating process or wastewater treatment process without prior notification, evaluation, and approval by the Division.

On February 12, 2008, the Division received notification from Golden Aluminum indicating that the Facility would be converting its titanium conversion coating process to a chrome conversion coating process effective February 18, 2008.

Delisting determinations are made on a case-by-case basis with respect to a specific waste generation process. Golden Aluminum's change to a new chromate conversion coating process using hexavalent chromium is a significant change from the titanium conversion coating process described in the Facility's April 8, 2005 delisting petition.

Golden Aluminum's 2005 delisting no longer covers the wastewater treatment sludge generated at the Facility, and the Facility was notified by the Division on March 24, 2008 that wastewater treatment sludge generated from the new chromate conversion coating process at the Facility must be collected and managed as a hazardous waste with the waste code of F019.

Statement of Basis and Purpose - Rulemaking Hearing of November 18, 2008

8.69 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 261, Appendix IX is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of Part 261, Appendix IX to Conditionally Delist F006 and F019 Hazardous Wastewater Treatment Sludge Generated by Advanced Surface Technologies, Inc. located at 6155 West 54th Avenue in Arvada, Colorado 80002

Appendix IX of Part 261 is being amended at this time to conditionally delist F006 and F019 hazardous wastewater treatment sludge generated by Advanced Surface Technologies, Inc. ("Advanced Surface Technologies" or "AST") at its industrial metal finishing facility located at 6155 West 54th Avenue in Arvada, Colorado (the "Facility").

This delisting will allow Advanced Surface Technologies to dispose of this waste at a Subtitle D solid waste landfill that meets the requirements of the Colorado Solid Waste Regulations (6 CCR 1007-2), provided it complies with the conditions of the delisting specifying disposal, record keeping, storage and sampling requirements for the delisted sludge. The Commission is requiring that annual verification sampling of the delisted waste be submitted to the Division within sixty (60) days of the sampling event for review against initial delisting criteria and sampling methodology. As an alternative to disposal in a Subtitle D solid waste landfill, the sludge could be sent to a metal recycling facility. Recycling the wastewater treatment sludge to reclaim heavy metals would further reduce the potential harm to human health and the environment posed by this waste.

On August 19, 2008, the Solid and Hazardous Waste Commission (the "Commission") tentatively approved a petition submitted by Advanced Surface Technologies to exclude or "delist" F006 and F019 hazardous wastewater treatment sludge generated at AST's Arvada, Colorado facility. Pursuant to the provisions of § 25-15-302(2), C.R.S. and 6 CCR 1007-3, § 260.20(c), a public notice of the Commission's tentative decision to approve the delisting was published in the Colorado Register for written public comment. The public comment period closed on October 10, 2008. No comments were received. On November 18, 2008, the Commission voted to make the decision final. The delisting will become effective twenty (20) days after publication in the Code of Colorado Regulations ("CCR") at 6 CCR 1007-3.

AST operates 11 metal finishing lines at its Arvada facility. Metal plating operations include nickel, tin, copper and precious metals. Burnishing, passivation and anodizing finishing operations are also conducted on-site.

Rinse wastewater from AST's metal finishing lines is conveyed to an on-site pretreatment system for metals removal. The rinse wastewaters undergo pH adjustment, filter pressing and micro-filtration prior to being discharged to the sanitary sewer under an industrial discharge permit issued by Metro.

AST's on-site wastewater pretreatment of electrolytic and electroless plating rinses generates approximately 1,400 pounds of wastewater treatment sludge on a weekly basis. The wastewater treatment sludge is regulated as an F006 and F019 listed hazardous waste.

Pursuant to the listing descriptions at 6 CCR 1007-3, section 261.31, wastewater treatment sludge generated from electroplating operations is classified as F006 hazardous waste. Wastewater treatment sludge generated from chemical conversion coating operations conducted on aluminum is classified as F019 hazardous waste.

The basis for the F006 and F019 hazardous waste listings are described in Appendix VII of Part 261of the regulations. Each listing is based on the hazardous constituents that are generally contained in the wastes described by the listing. The hazardous constituents that form the basis for the F006 listing include cadmium, hexavalent chromium (Chromium VI), nickel and complexed cyanide. Hexavalent chromium and complexed cyanide are the hazardous constituents that form the basis for the F019 listing.

Analytical sampling of AST's wastewater treatment sludge was conducted prior to the submittal of its delisting petition. Metal finishing operations and wastewater treatment processes at the Facility do not significantly change on a day-to-day basis, and the collected samples adequately represented the waste in question. The Hazardous Materials and Waste Management Division at the Colorado Department of Public Health and Environment (the Division), evaluated the sampling results and the request for petitioning of the waste in accordance with the delisting criteria in § 260.22. This evaluation was presented to the Commission.

Four discrete samples of AST's wastewater treatment sludge were collected in May and June of 2007. The samples were collected in general accordance with the Sampling and Analysis Plan (SAP), dated April 23, 2007.

Analytical results of AST's wastewater treatment sludge samples indicated that the petitioned sludge contains hazardous constituents (cadmium, nickel, cyanide and chromium VI) that are a basis for listing the waste as an F006/F019 hazardous waste. Based on the chemical analysis of the waste samples, the average total concentration of cadmium, cyanide, chromium VI, and nickel is 10.55 mg/kg, 0.28 mg/kg, 39.5 mg/kg, and 20,450 mg/kg, respectively. Other constituents at or above detection limits in the petitioned waste included arsenic (7.17 mg/kg), barium (3.43 mg/kg), copper (17,500 mg/kg), lead (17.20 mg/kg) and silver 42.33 mg/kg). With the exception of nickel, the concentrations are reported to be below their respective EPA Risk-Based Concentration (RBC) guidance values.

Using the average total concentration of the constituents in the waste, health based risk calculations were determined for residential exposure to the waste. The risk calculations were determined using the assumptions and rational outlined in the CDPHE Hazardous Materials and Waste Management Guidance on Risk Assessment, and current health based toxicity data obtained from EPA's Integrated Risk Information System (IRIS).

The results of the waste sampling indicated that the waste does not contain concentrations of any of the constituents which formed a basis for the F006/F019 listing at levels which exceed health based levels assuming direct exposure in a residential setting. Excluding arsenic and nickel, evaluation of the combined risk for all constituents in the waste indicated that the waste is within the allowable risk range for a residential land use setting.

A total carcinogenic risk greater than 1 x 10-6 of one added cancer death per million exposed individually, represents an unacceptable risk to human health. With the exception of arsenic, the calculated carcinogenic risk due to cadmium and chromium is 5.16×10^{-8}. The calculated risk including arsenic is 1.87×10^{-5}.

The risk assessment calculations for the non-carcinogenic risk or accumulative total hazard quotient posed by the concentrations of detected metals in AST's wastewater treatment sludge were calculated at a level of 2.13, which exceeds the hazard quotient index (HI) of 1 for the Residential Soil exposure scenario. When nickel is excluded however, the HI is calculated to be 0.71.

The potential for constituents in the waste to leach out and contaminate groundwater at concentrations that represent a threat to human health and the environment was evaluated using a toxicity characteristic leaching procedure (TCLP) analysis of the waste. The results of the TCLP analysis indicated that the waste does not leach metals at concentrations above regulatory standards. However, as a condition of this delisting petition, all delisted sludge will be disposed in a solid waste landfill or recycled at an appropriate metal reclamation facility.

Analysis of AST's waste treatment sludge also indicated that the waste sludge does not contain any organic constituents. Therefore, consideration of the potential health effects caused by exposure to organic constituents was not considered in evaluating the petition by the Division. In addition, the samples did not exhibit the corrosivity, ignitability, reactivity, or toxicity characteristics of hazardous waste.

This delisting is being granted under conditions specifying disposal, record keeping, storage and sampling requirements for the delisted sludge. Conditional delisting of the waste also prohibits any major changes to the electrolytic and electroless plating operations or wastewater treatment process without prior notification, evaluation, and approval by the Division.

This delisting does not apply to waste that demonstrates "significant changes" as defined in Delisting #008 in Part 261, Appendix IX--Wastes Excluded Under § 260.20 and § 260.22(d), or if any of the conditions specified in Part 261, Appendix IX for this delisting are not met. Should either of these occur, the waste is and must be managed as a hazardous waste. While the Commission is approving this conditional delisting for this specific waste at this specific site, the findings and criteria associated with the approval are unique. Other petitions for delisting, even if similar in material or use, will be reviewed by the Division on a case-by-case basis.

Statement of Basis and Purpose - Rulemaking Hearing of May 19, 2009

8.70 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 6 is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-314(1), C.R.S.

Amendment of § 6.04 Annual Commission Fee

Section 6.04 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) is being amended at this time by revising paragraph (a) to reflect the annual Commission fee to be assessed for fiscal year 2009-2010.

Statement of Basis and Purpose - Rulemaking Hearing of May 19, 2009

8.70 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 262 and Part 100 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § § 25-15-302(2) and (3.5), C.R.S.

Amendments to Hazardous Waste Fees

After three years under the present hazardous waste fee structure, the Department has determined that an increase in fees is necessary beginning in State Fiscal Year 2010, which begins on July 1, 2009. § 25-15-301.5, C.R.S., provides general directives for implementation of the hazardous waste regulatory program. These directives include implementing a hazardous waste program that a) maintains program authorization by the U.S. EPA, b) promotes a community ethic to reduce or eliminate waste problems, c) is credible and accountable to industry and the public, d) is innovative and cost-effective, and e) protects the environmental quality of life for impacted residents of the state. § 25-15-302(2), C.R.S., provides guidance for future fee adjustments by the Solid and Hazardous Waste Commission. This guidance includes setting the fees such that the revenue generated by each fee approximates the actual reasonable program costs attributable to the facilities paying the fee.

The Department is authorized by the U.S. EPA to operate the hazardous waste regulatory program in Colorado in lieu of the federal government. One of the key criteria evaluated by the U.S. EPA in authorizing the state program is resources, both in terms of funding and in terms of qualified personnel. Without an increase in fee revenues, the Department has determined that it will not be able to operate an adequate program beginning in State Fiscal Year 2010 and would be in danger of losing program authorization.

The purpose of these amendments is to implement a balanced increase in hazardous waste program fees that the Department expects will provide adequate funding for the hazardous waste program for a period of approximately two years. The adjusted fees are expected to increase the revenue from fees to the hazardous waste program by approximately 15% in state fiscal years 2010 and 2011. When the funding provided by U.S. EPA is considered, the fee changes are expected to increase funds available to operate the hazardous waste program by approximately 11%. This 15% fee increase has been discussed and agreed to by a group of key stakeholders convened by the Department. The stakeholder group included the two largest treatment, storage, and disposal facilities in Colorado, one of the largest hourly fee payers, and several important Large Quantity Generators and Small Quantity Generators of hazardous waste. This group met three times in January and February, 2009, and discussed many aspects of the Department's Hazardous Waste Program and its budget and finances. In the three previous adjustments to this fee structure the Department proposed adjustments that would cover anticipated funding needs for the following three years rather than two. In discussion with the stakeholder group it was agreed that, given the current economic recession, proposing adjustments to cover a 2-year period rather than three was appropriate.

Over the next two years, Department costs are anticipated to rise about 3% per year, or 6% over the 2-year period of this fee increase. In addition, over this timeframe, the EPA hazardous waste grant is anticipated to remain the same, as it has for many years. Therefore, as the EPA grant represents about one-third of program funding, the fee revenue must cover inflationary increases on those items paid for by the EPA grant. This represents about another 3% increase over the 2-year period. On top of these cost increases is a one-time $200,000 upgrade to our databases and data management system. This represents another 4% increase that is needed over the 2-year period. Lastly, because of the very tough economic recession, we anticipate a decrease in the number of fee-paying businesses in Colorado. Our staff is projected to stay at about the current levels over the next two years so the drop in the number of fee payers must be offset by further increases in the fee amounts. This accounts for the remainder, or about 2%, of the 15% overall fee increase. It is worth noting that this 15% fee increase represents about a 7.5%/yr fee increase over its projected two-year life expectancy. This is significantly less than the last two hazardous waste fee increases which have averaged about an additional 10%/yr over the last six years.

It is also important to note that the proposed fee increase is not a flat 15% fee increase across the board. Some fee components have been increased more than 15%, some less. The reason for the different fee increase amounts is that we have tried to adjust each fee component to more closely align with the Department's investment of time and effort in activities related to that component, as is asked for by § 25-15-302(2), C.R.S. This is explained more fully in the following sections.

The amendments being adopted at this time include the following:

a) General: A few non-substantive clarifications and corrections are being incorporated into Part 100 and Part 262. Substantive changes are explained in more detail below.

b) Amendment of Part 262: Section 262.13 of Part 262 is being amended to:

1) Raise the annual fee for Conditionally Exempt Small Quantity Generators (CESQGs) that generate waste codes F001, F002, F004, and F005 from $100/year to $200/year. The Department believes this 100% fee increase is justified for the following reasons:

a. The Department is investing an increasing amount of resources in ensuring that CESQGs comply with the regulations. The four waste codes listed in this regulation represent the most problematic and wide-spread contamination issues in Colorado. These are solvent wastes that are extremely toxic and extremely mobile in the environment. Therefore, the Department is obligated to carefully monitor generators of these waste codes to ensure that they stay in compliance and safely manage their wastes so that public health and the environment are adequately protected. At $200/year, the CESQG fee is being brought into close alignment with the LQG fee in terms of the fee revenue compared to the Department's investment of time and effort in this regulated sector.

b. This fee was instituted in 2007 and is now paid by about 1100 CESQGs in Colorado. Simply building a system to bill and collect this fee has proven to be a large undertaking with significant time and effort invested by Department staff. At a fee level of $100/year, too much of the fee went to paying for its collection and not enough went to program implementation. To resolve this problem, the fee needs to be significantly increased.

2) Raise the annual fee for Small Quantity Generators (SQGs) from $480/year to $625/year. The Department believes this 30% fee increase is justified because of the rapidly increasing time and effort investment the Department is making in this 720-facility regulated sector. Over the last several years, the Department has implemented an annual self-certification program for SQGs where each facility self-reports their compliance status. This allows the Department to effectively re-train each facility on the regulatory requirements each year. Similar programs in other states have an impressive record of improved compliance rates – our program is still too new to demonstrate this type of improved compliance. Self-certification programs are very resource intensive. The self-certifications must be followed up with a relatively high number (~100) of random inspections each year to ensure accurate and honest self-certifications and to evaluate how the program is working. This is about the same number of inspections the Department performed at SQGs each year before self-certification, but the administration of the self-certification program has added significant workload – preparation of certification forms and instruction booklets, follow-up with late filers, data entry, and data evaluation. Bringing the SQG fee up to $625 does not yet raise this fee to a level equivalent to the CESQG and LQG fee in terms of Department time and resources invested. However, in light of the poor economy and the fact that most SQGs are small businesses, the Department felt limiting the fee increase to 30% was appropriate at this time. Further adjustments attaining equity and parity can be made in the future.

3) Raise the annual fee for Large Quantity Generators (LQGs) from $3,050/year to $3,200/year. The Division believes this 5% fee increase is justified because the Department is not decreasing its efforts within the LQG sector. These facilities are the largest waste generators in Colorado and have the biggest potential effects on public health and the environment. We have invested a significant amount of resources in this sector over the last 10 years and have seen measurable improvement in LQG compliance rates. This, in turn, means that public health and the environment are safer. However, experience has shown that backing off our efforts in this sector will quickly result in an erosion of our compliance gains. The LQGs have historically paid a higher share of fee revenue because the Department has spent more time and effort on LQGs than we have SQGs and CESQGs. In the next few years, Department time with LQGs will remain essentially flat while efforts at SQGs and CESQGs will increase. Therefore, the proposed fee increase for LQGs is much less than either the SQG or CESQG increases.

c) Amendment of Part 100.3:

1) The Annual Fee Table at the end of Section 100.31 is being amended to include an overall 5% increase in TSD fees. This applies to both the volume fees and the minimum fees for all classes of facilities. The Division believes this 5% fee increase is appropriate. It is less than the increases being proposed for SQGs and LQGs, and it is less than the increase being proposed for the hourly fee rate. This is due to the fact that the Department is slowly decreasing its investment of time and effort in TSDs – all TSDs needing permits are permitted and our efforts are in permit maintenance; our inspection efforts at TSDs are driven by EPA requirements, but compliance rates have been high so extra time spent in enforcement has been low. Therefore, this lower fee increase keeps TSD fees in line with the other two major fee components (hourly fees and generator fees) in terms of revenue versus time and effort invested.

2) Section 100.32(a)(2) is being amended to clarify that document review and activity fees will apply to pre permit application meetings and review of documents beginning with the second meeting between the Department and the facility, regardless of whether the facility files a permit application, Corrective Action Plan, or other document listed in Part 100(a)(1). The Department tries to get contaminated facilities to enter our regulatory process through a Corrective Action Plan (CAP) because that is the most efficient mechanism for the facility and for our staff. However, in many cases, after investing quite a bit of time meeting with a facility and explaining the CAP document and process, the facility will not submit a CAP and the Department must resort to alternative enforcement mechanisms. This makes our initial investment of time unrecoverable. To alleviate this problem somewhat, the proposed regulatory change states that we will begin charging hourly fee beginning with the second meeting, rather than the third.

3) Section 100.32(b) is being amended to change the hourly rate for the document review and activity fee from $135/hour to $150/hour – an 11% increase. While this rate is high, the Department believes it is justified for three reasons:

   a. It is a "loaded" fee that recoups the cost of not only the technical staff performing the review, but also the proportional cost of direct management, direct administrative support, direct IT support, and indirect Department support;

   b. The Department has documented that the "loaded" cost is actually $152/hour for 2010, slightly more than the proposed $150/hour; and

   c. The document review and activity fee was originally implemented in 1991 at a "loaded" rate of $85/hour. Inflating $85/hour through 2010 results in $162/hour, again more than the proposed $150/hour.

4) Section 100.33 is being amended to raise the fee charged for certain notifications from $100 to $120. This fee was added in 2006 and is intended to be a cost recovery fee for Department staff time spent processing the new or revised notifications. It is similar to processing fees charged by other Departmental programs. Similar to item 2 above, the main need for this fee increase is to continue to fully cover our transaction costs. This fee is only charged for the following types of notifications:

   a. Notifications where a facility is lowering its generator status; and

   b. New notifications for SQGs and LQGs, but not for CESQGs.

Statement of Basis and Purpose - Rulemaking Hearing of August 18, 2009

8.71 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 101 is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of § 101.1(b) to change "Informal Conference" to "Compliance Conference"

This amendment revises the paragraph heading for paragraph (b) of section 101.1 to replace "Informal Conference" with "Compliance Conference". The reason for this change is that the term "Informal Conference" refers to a meeting that is in the informal part of the Hazardous Materials and Waste Management Division's (the "Division's") enforcement process, but is not "informal" in terms of how the meeting is conducted. This has resulted in some confusion to the regulated community.

When the Division issues a Compliance Advisory to a facility for violations discovered during an inspection, the facility may request an Informal Conference. If the Division intends to assess a penalty for the violations, the Division strongly encourages the facility to come in for an Informal Conference, although doing so is entirely optional.

The Informal Conference is an opportunity for facility representatives to present information to the Division regarding the violations discovered during the inspection of its facility. Examples of some topics typically discussed during the Informal Conference include:

- correction of erroneous or incomplete information supplied to the inspector;

- evidence or regulatory interpretations arguing that conditions observed by the inspector do not constitute violations; and

- information regarding progress made by the facility to correct the noted violations.

The Informal Conference is also an opportunity for the Division to inform facility representatives of any revisions to the Compliance Advisory that it may be considering. This might include, for example, adding violations to those already included in the Compliance Advisory, sampling results if any, or subsequent determinations that items noted in the Compliance Advisory are not violations. If a compliance schedule is not noted in the Compliance Advisory, the Division may also work with the facility during the Informal Conference to finalize a schedule to correct any noted violations not already corrected.

The agenda for these meetings is to review each violation, listen to the facility's response to the violation (they may agree that the violation occurred, but differ as to the number of counts; or they may be able to present information that the alleged violation did not occur; etc.), and then learn from the facility what actions they have undertaken to return to compliance. In addition, the Division will inform the facility of its plans for any formal enforcement that may be necessary.

Just as the Compliance Advisory and inspection report are part of the Division's administrative record of enforcement activities against a facility, the information supplied during the Informal Conference is also considered a part of the administrative record. In order to preserve information exchanged during the Informal Conference for the record, these meetings are recorded. The Division is also typically represented at the Informal Conference by the Colorado Attorney General's office. While the Division encourages facilities to bring legal representation to the Informal Conferences, most times the facilities do not. These factors add an additional level of formality to the Informal Conference.

This amendment to change the term "Informal Conference" to "Compliance Conference" has no other effect than to make the term more accurate as to the post-inspection process that it is describing and much less confusing for the regulated community.

Statement of Basis and Purpose - Rulemaking Hearing of August 18, 2009

8.71 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260 and 261 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendments of § 260.10 and § 261.33

The purpose of the amendment to § 261.33 is to clarify the scope of the P and U waste code listings to unused commercial chemical products, and to help remove the confusion regarding Colorado's more stringent regulation of formulations containing more than one active ingredient.

Discarded commercial chemical products are considered hazardous waste in Colorado if they are listed in 6 CCR 1007-3, section 261.33(e) and (f) (the "P" and "U" lists) or if they exhibit one or more of the hazardous waste characteristics of Part 261, Subpart C.

A comment listed in the federal regulations at 40 CFR Section 261.33(d) indicates that the listing applies to commercial and technical grades of the product, and to formulations in which the chemical is the "sole active ingredient". "Sole active ingredient" means the active ingredient is the only chemically active component for the function of the product. If the discarded product is a formulation with more than one active ingredient, it would not be within the scope of the federal listing.

The Department has never believed that EPA's approach made sense – if P and U chemical wastes are each dangerous and toxic, then a mixture of those chemicals as active ingredients in a waste would be equally or even more dangerous and toxic. This is the reason the Department did not add the note to this section that appears in the federal regulations. Unfortunately, many regulated entities in Colorado do not realize that this note is missing from the Colorado regulations.

These amendments clarify that Colorado is more stringent than the federal requirement, and specifies that formulations may have more than one active ingredient and still meet the listing description. An active ingredient is defined as a component or mixture that performs the function of the product, even if it is present in very low concentration in the product. This definition for active ingredient is also being added into section 260.10 of the regulations at this time. These amendments to § 260.10 and § 261.33 will hopefully clarify Colorado's regulations mitigate some of the misunderstanding in the regulated community regarding waste mixtures with more than one active ingredient.

Information on whether a particular chemical is an active ingredient or performs the function of the product may be documented on the product label, instructions for use, Material Safety Data Sheet

(MSDS) or other manufacturer documentation. An Interpretive Memo *(P and U Listed Hazardous Wastes: Discarded Commercial Chemical Products)*, including a flowchart describing the process to follow when determining if your waste is a P or U listed waste is available at the Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division website at http://www.cdphe.state.co.us/hm/pandulisted.pdf.

Statement of Basis and Purpose - Rulemaking Hearing of August 18, 2009

8.71 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 262, 264 and 265 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Removal of National Environmental Performance Track/Colorado Environmental Leadership Program Provisions

These amendments revise the Colorado Hazardous Waste Regulations (6 CCR 1007-3) to remove the extended accumulation time requirements and reduced inspection frequency requirements currently available to members of both Colorado's Environmental Leadership Program and the U.S. Environmental Protection Agency's (EPA's) National Environmental Performance Track program.

Adoption of these amendments became necessary following EPA's decision to terminate the federal Performance Track Program effective May 14, 2009.

On January 11, 2005, Colorado adopted state analogs to correspond to the National Environmental Performance Track regulations promulgated by EPA and published in the Federal Register on April 22, 2004 (69 FR 21737-21754), and as amended on October 25, 2004 (69 FR 62217-62224).

On March 16, 2009, EPA Administrator Lisa P. Jackson issued a memorandum halting the federal Performance Track program. The Administrator's memorandum was followed by a memorandum from Chuck Kent, Director, Office of Policy Economics, and Innovation, dated March 25, 2009, which provided more details about the termination, including that the low priority for routine inspections incentive was no longer in effect. A notice announcing EPA's decision to terminate the Performance Track Program was published in the Federal Register on May 14, 2009 (74 FR 22741-22742).

In order to maintain its authorization to operate its state program in lieu of the U.S. EPA operating a federal program, Colorado must adopt state requirements equivalent to and consistent with the overlying federal requirements. To maintain consistency with the federal requirements and to remedy these state requirements from inadvertently become less stringent than the federal program, the Commission is at this time revising the state analogs to delete these extended accumulation time requirements and decreased inspection frequency incentives. These amendments provide state equivalency with the regulatory requirements of the Environmental Protection Agency.

The amendments being adopted at this time include:

1. Deleting the existing extended accumulation time requirements found at paragraphs (k), (l), and (m) of § 262.34 of Colorado's hazardous waste regulations; and

2. Revising § § 260.10, 264.15(b)(4), 264.15(b)(5), 264.174, 264.195, 264.1101(c)(4), 265.15(b)(4), 265.15(b)(5), 265.174, 265.201, and 265.1101(c)(4) to delete the language allowing members of the Colorado Environmental Leadership and EPA Performance Track programs to apply for an adjustment to the frequency of inspections for certain hazardous waste units and areas.

Although EPA has terminated the federal Performance Track Program, Colorado will continue to operate its performance-based state program. Colorado's Environmental Leadership Program (ELP) is a statewide environmental recognition and reward program administered by the Colorado Department of Public Health and Environment's (the Department) Sustainability Program. The ELP is a voluntary program designed to recognize and reward organizations and businesses that demonstrate superior environmental performance and, as a result, consistently operate at a level that goes beyond mere compliance with environmental regulations. This voluntary incentive and recognition program encourages program members to focus on issues important to their communities and to take a creative approach to solve local problems and achieve environmental goals.

Membership in the program is open to all types of organizations and businesses from large corporate entities to small businesses, government agencies, nonprofits and academic institutions. To participate in the leadership program, an organization must meet the ELP eligibility related compliance requirements and fit within a specific "tier" of the program.

In exchange for the environmental commitment and superior environmental performance, Colorado's leadership program will continue to provide benefits and incentives such as recognition, public-private partnerships, networking and technical assistance to its environmental leaders. Additional information regarding Colorado's Environmental Leadership Program is available at http://www.cdphe.state.co.us/el/elp/index.html

Statement of Basis and Purpose - Rulemaking Hearing of February 16, 2010

8.72 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 260 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Addition of § 260.34 Standards and Criteria for Non-waste Confirmations

These amendments add standards and criteria for making non-waste confirmations into § 260.34 of the Regulations provide state analogs to the applicable federal provisions of 40 CFR § § 260.30, 260.33, and 260.34 promulgated by the Environmental Protection Agency (EPA) as part of the Revisions to the Definition of Solid Waste (DSW) final rule published in the Federal Register on October 30, 2008 [73 FR 64668-64788].

EPA is currently reviewing a petition filed with the Administrator under RCRA section 7004(a) requesting that the Agency reconsider and repeal the DSW rule, and is soliciting comments and information to assist the agency in evaluating the petition. The Hazardous Materials and Waste Management Division (the "Division') may propose additional revisions to the Regulations as it completes its review of the October 2008 DSW rule, and any further amendments promulgated by the EPA as a result of its review of the petition to repeal the DSW rule.

These amendments establish a non-waste confirmation process into § 260.34 that provides persons with an administrative process for receiving a formal confirmation that their materials are not discarded and, therefore, not solid wastes when legitimately reclaimed. Hazardous materials presented for a non-waste confirmation must be legitimately recycled and, therefore, must meet the legitimacy factors of § 261.2(f), which are being promulgated today under a separate rulemaking.

The non-waste confirmation process is voluntary. Facilities may chose to continue to use the self-implementing portions of any applicable waste exclusions and, for the vast majority of cases, where the regulatory status of the hazardous material is evident, self-implementation will still be the most appropriate approach. In addition, facilities may continue to contact the Division to ask for informal assistance in making these types of non-waste confirmations. However, for cases where there is ambiguity about whether a hazardous material is a solid waste, today's formal process can provide regulatory certainty for both the facility and the Division.

The process for non-waste confirmations is not intended to affect any existing exclusion under § 261.4. The process is also not intended to affect any variance already granted under § 260.30 or other EPA or Division determination. Generators or reclaimers operating under an existing exclusion, variance or other EPA or Division determination do not need to apply for a formal non-waste confirmation under today's rule.

By providing more explicit criteria for determining the legitimacy of recycling practices, and an administrative process for receiving a formal non-waste confirmation, the Division expects these amendments to encourage the safe, beneficial recycling of hazardous materials. This regulatory initiative is consistent with the Division's policy of encouraging the recovery and reuse of valuable resources as an alternative to land disposal, while at the same time maintaining protection of human health and the environment.

This Basis and Purpose incorporates by reference the applicable portions of the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 73 FR 64668-64788, October 30, 2008.

Statement of Basis and Purpose - Rulemaking Hearing of February 16, 2010

8.72 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 261 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Legitimate Recycling Amendments

These amendments to § § 261.1 and 261.2 codify the criteria to be used in determining when recycling of materials is legitimate, and provide state analogs to the applicable federal provisions of 40 CFR § 260.43 that were promulgated by the Environmental Protection Agency (EPA) as part of the Revisions to the Definition of Solid Waste (DSW) final rule published in the Federal Register on October 30, 2008 (73 FR 64668-64788).

EPA is currently reviewing a petition filed with the Administrator under RCRA section 7004(a) requesting that the Agency reconsider and repeal the DSW rule, and is soliciting comments and information to assist the agency in evaluating the petition. The Hazardous Materials and Waste Management Division (the "Division') may propose additional revisions to the Regulations as it completes its review of the October 2008 DSW rule, and any further amendments promulgated by the EPA as a result of its review of the petition to repeal the DSW rule.

The amendments being adopted at this time include:

1) modifying the definition of "reclaimed" in § 261.1(d)(4); and

2) codifying the criteria to be used in determining when recycling of materials is legitimate into § 261.2(f).

Under the RCRA Subtitle C definition of solid waste, certain hazardous materials, if recycled, are not solid wastes, and therefore, are not subject to RCRA's "cradle to grave" management system. Because there are significant economic incentives to manage hazardous materials outside the RCRA regulatory system, there is a potential for some handlers to claim that they are recycling, when, in fact, they are conducting waste treatment, storage and /or disposal in the guise of recycling.

These amendments establish hazardous waste recycling legitimacy criteria as specific regulatory provisions for distinguishing legitimate recycling from "sham" recycling practices, and activities undertaken by an entity to avoid the requirements of managing a hazardous material as a hazardous waste. The legitimacy criteria are intended primarily to clarify in a regulatory context the concept of "legitimate recycling," which has been and is a key component of RCRA's regulatory program for recycling, but which to date has been implemented without regulatory criteria. These amendments include specific regulatory provisions for determining when hazardous materials are recycled legitimately.

A legitimacy determination involves evaluating case-specific information to determine whether or not a material being recycled is in effect being used as a commodity, rather than as a waste. The legitimacy determination would be a case-specific judgment as to whether a particular recycling practice is consistent with the criteria in § 261.2 (f) of the Regulations.

The four general criteria of § 261.2(f) for use in determining whether recycling of hazardous materials is legitimate are:

1) The material provides a useful contribution to the recycling process or to a product or intermediate of the recycling process, and the recycling process produces a valuable product or intermediate;

2) The recycling process yields a valuable product or intermediate that is:

    a. Sold to a third party; or

    b. Used by the recycler or the generator as an effective substitute for a commercial product or as a useful ingredient or intermediate which is fed directly into a manufacturing process;

3) The material to be recycled is managed as a valuable commodity; and

4) The product of the recycling process:

a. Does not contain significant concentrations of any hazardous waste constituents that are not found in analogous products;

b. Does not contain significantly elevated levels of any hazardous constituents that are found in analogous products; and

c. Does not exhibit a hazardous waste characteristic that analogous products do not exhibit.

The legitimacy criteria of § 261.2(f) are intended to apply to a wide range of recycling scenarios across a wide array of industries. Although the Division expects that most, if not all, legitimate recycling practices will conform to each of the four criteria, the application of the criteria will require some subjective evaluation and balancing. Depending on the case-specific facts and circumstances, certain criteria may weigh more heavily than others in making legitimacy determinations. These determinations will require specific evaluation by the Division on what is considered "significant concentrations" of any hazardous constituents in accordance with § 261.2(f)(2)(iv)(A) & (B).

If the Department determines that a process is not legitimate recycling, the activity would be considered waste treatment or disposal and would thus be subject to regulation under the RCRA Subtitle C, if hazardous. These proposed criteria are intended to apply to all recycling of hazardous materials.

If an owner/operator claims they are conducting legitimate recycling but the Division determines that the process is sham recycling, the recycler and the generator(s) of the recycled material may be subject to enforcement action.

This Basis and Purpose incorporates by reference the applicable portions of the preamble language for the Environmental Protection Agency regulations published in the Federal Register at 73 FR 64668-64788, October 30, 2008.

Statement of Basis and Purpose - Rulemaking Hearing of February 16, 2010

8.72 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 261 and 268 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Mustard Agent Amendments

These amendments revise the K901 and K902 mustard agent listings in § 261.32(a) (Hazardous Waste from Specific Sources) and Appendix VII of Part 261 (Basis for Listing Hazardous Waste), and add the K901, K902, P909 and P910 listings to the Treatment Standards for Hazardous Waste table in § 268.40 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3). These amendments also correct a typographical error in the header of the table in § 268.40.

The Colorado Hazardous Waste Regulations, 6 CCR 1007-3, Part 261, Subpart B, allow chemicals or other materials that are solid wastes to be added to the hazardous waste listings if the chemicals can be shown to meet any one of the criteria listed in § 261.11, and these listings may be revised based upon relevant information.

In previous rulemakings (§ 8.30, § 8.46, and § 8.48), the Commission determined the reason for the listing of chemical munitions on the basis of the available information that the chemical agents (HD and HT) were toxic as compared to the regulatory criteria for listing a hazardous waste found at 6 CCR 1007-3, § 261.11(a), and that there was adequate justification to add these Mustard Agents to the P-listed wastes found in § 261.33 of the regulations by adding waste codes P909 and P910 for the H and HD forms of Mustard Agent (CAS #505-60-2) and the HT form of Mustard Agent (CAS#505-60-2 and CAS # 63918-89-8), respectively. At the time of the original listings, the regulatory evaluation was focused upon the EPA determination that Mustard was a reactive waste due to its propensity to rapidly react with water to form hydrogen sulfide as well as hydrochloric acid, that the toxicity of Mustard Agents met the definition of an acutely toxic hazardous waste found at both § 261.11 (a) and § 261.11 (a)(2), and that the Army alleged that it had conservatively chosen to apply the toxicity characteristic waste codes applicable to metal constituents (the "RCRA metals", Arsenic, Barium, Cadmium, Chromium, Lead, Silver, Selenium, and Mercury), or D004 – D011.

At the time of these previous rulemakings, the Commission was acting upon available information, but better, more definitive, information has come to hand that indicates that other consequential constituents are present, that themselves, warrant a revision of the initial listing actions.

Background Documents

The Army, in compliance with regulatory requirements associated with Interim Status with respect to their stockpile storage mission, submitted a Part A Permit Application which details what they believed to be the constituents of the munitions in storage. This application is attached to this rulemaking as Exhibit 1.

The Army, in compliance with regulatory requirements to characterize these munitions, produced and presented to the Division the Munitions Assessment and Characterization Report (the "MACR"). This document was classified as a For Official Use Only ("FOUO") document which restricts this information to only those with a need to know the contents in an official capacity. Since the time of the original Division briefing to the Commission on these revisions to the listing specifications, on August 18, 2009, the Army has reclassified sections of this document to allow the general release of selected segments of this information to the public record. This reclassified document is attached to this rulemaking as Exhibit 2.

The Division, in concert with the regulatory and technical review of the submitted MACR and other waste characterization data for mustard agent, extracted a list of constituents found within, or associated with the mustard housed in the agent cavities of these munitions. This list of constituents is attached to this rulemaking as Exhibit 3.

The information found in Exhibits 1, 2, and 3 concerning the constituents found in or associated with mustard did not contain any information that was useful in determining the magnitude, or concentration of any of the constituents found in the chemical agent. However, prior to and during the acquisition of the information found in Exhibits 1, 2, and 3, the ABCDF Demil Facility located at the Edgewood Area of Aberdeen Proving Grounds had been treating mustard stored in ton containers with a hydrolysis reactor, in a process considered the prototypical approach planned for implementation at Pueblo Chemical Depot, designated the Pueblo Chemical Agent-Destruction Pilot Plant ("PCAPP"). The sampling data available from the ABCDF facility on the hydrolysate treatment residuals provided the first window into the actual composition of mustard. This data is attached to this rulemaking as Exhibits 4a and 4b. The Division's assessment of this data with respect to mustard characterization was presented to the Commission on August 15, 2009, and this PowerPoint presentation is attached to this rulemaking as Exhibit 5.

Previous Listing Determinations

In assessing the characterization that has been applied to munitions housing the chemical agent mustard with respect to the current listing, the assessments found in previous rulemakings (§ 8.30, § 8.46, and § 8.48) were evaluated in the light of the currently available information. EPA's assignment of the D003 characteristic is still operative. The Division finds that the toxicological profile presented for mustard in these previous rulemakings are entirely valid assessments and adequate to justify the retention of the P-listing for these wastes as an acutely toxic substance, the addition of the chemical agent mustard components HD and HT to the P-list at § 261.33 (e), the addition of mustard(s) to Appendix VIII of § 261 as a mutagens and carcinogens, the K-list at § 261.32 (a), and the addition of mustard(s) to Appendix VII of § 261. The P-listing is and has been typically applied to single component, off-specification chemicals. In these rulemakings, the K- listing for mustard contemplates the presence of other toxic constituents found in Appendix VII. Mustard is, in fact, no such single component material, and there are other chemicals that are needed in Appendix VII mustard listings besides the mustard(s) at concentrations of concern.

Contemporary Data and Revision of Listing Discussion

At the time of the previous rulemakings, the information known and available to the Commission did not include any definitive discussion regarding other constituents or characteristics exhibited by mustard. This was not an oversight, but it represented the extent of the available information and data. Since that time, the Division has closely scrutinized all available data and information pertaining to the composition of mustard.

During the previous rulemakings, no information was available regarding the corrosive nature of mustard, except its well known vesicant interactions with skin. It was known at that time that mustard was not an aqueous material, and that insufficient water was present in mustard to allow a determination of pH to forward an understanding of the potential that mustard may, or may not exhibit the D002 - characteristic of corrosivity, as defined in § 261.22 (a)(1). In the intervening time period since the original rulemaking, the Division has carefully evaluated the phenomena of leaking munitions that occur at PCD, along with the anecdotal information submitted in the MACR. The result of this analysis revealed three important findings: (1) the physical process of leaking occurs as a result of pressurization of the agent cavity housing the mustard, and (2) the propulsive force or pressurization of the agent cavity is, in fact, caused by the interaction of mustard with the steel of the agent cavity, a corrosive mechanism, and (3) a penetration of the agent cavity must occur to allow the pressurized contents of the agent cavity to escape, and this weakened area of the agent cavity enclosure is caused by corrosion of the steel by mustard. Furthermore, data from the ABCDF facility conclusively show that mustard's reaction with water, while dubious for the copious generation of hydrogen chloride gas that may adversely affect human health, does generate sufficient dissolved hydrogen chloride gas in the form of hydrochloric acid to generate a pH less than the 2 standard units needed to exhibit the corrosive characteristic. Mustard is so toxic that sampling, handling, health, and safety issues preclude the execution of the definitive engineering test specified to elicit the corrosion to steel determination found at § 261.22 (a)(2). With the absence of test data, this is overwhelming evidence to conclude that mustard exhibits the characteristic of corrosivity, D002.

At the ABCDF facility, 8 percent by weight mustard agent was hydrolyzed with an excess of water in a reactor, and then pH adjusted to alkaline conditions (>12.5) to complete the reaction and eliminate the D003 characteristic. The inherently large dilution of the agent in water necessary to complete the reaction resulted in a treatment residual, or hydrolyzate that exhibits several characteristics. It is evident that the virgin mustard must either exhibit extraordinary concentrations of the compounds associated with these characteristics, or exhibits a propensity to generate these characteristics. The sampling of hydrolyzate can be conducted without the extreme risk associated with sampling virgin mustard, and the volumes of secondary wastes generated are inconsequential. These data represents the best data for understanding the composition of mustard. The accumulated ABCDF data support the conclusion that the following characteristics are applicable to mustard, and should be incorporated into the Treatment Standards for Hazardous Waste, § 268.40, and the following characteristics should be added to § 261, Appendix VII, Basis of Listing for mustard K listed wastes:

D002	Corrosive
D003	Water Reactive Subcategory
D004	D011 (Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, and Silver)
D027	1,4- Dichlorobenzene
D028	1,2 – Dichloroethane
D029	1,1 – Dichloroethylene
D039	Tetrachloroethylene
D040	Trichloroethylene
D042	2,4,6-Trichlorophenol
D043	Vinyl Chloride

Underlying Hazardous Constituents (“UHC”) are those compounds present or reasonably expected to be present in characteristic waste at the point of generation. UHCs have their own treatment standards found in the Universal Treatment Standards Table at § 268.48. The accumulated ABCDF data support the conclusion that UHC chemicals are present in mustard and mustard treatment residuals. The variability of mustard within munitions is somewhat understood, but the presence and concentrations of residual production chemicals, by-products, congeners, and chemicals formed by the degradation of these substances cannot be well established with certainty. Therefore, a generally applicable list of chemicals with a reasonable probability of occurrence as UHCs related to mustard and mustard treatment residuals cannot be presently defined because their occurrence and concentration are inherently related not only to the parent mustard, but also to the precise treatment applied. Due to these uncertainties, most generators of hazardous waste must sample the hazardous waste, as generated, to determine UHCs, but mustard sampling cannot be entertained, or reasonably required without significant risk. The Army must sample treatment residuals to make this determination required by the Land Disposal Restrictions. The mix design (recipe), and operating variables (e.g., residence time, temperature, and pH) can alter the actual composition of a treatment residual; therefore, the applicable UHCs list associated with mustard is peculiar to the treatment process. The ABCDF facility UHC list was ascertained by sampling and analysis of the hydrolyzate, and if the PCAPP plant was operated identically, this list would be valid for PCAPP. If there are local variations, or colloquial initiatives at PCAPP, the ABCDF UHC list may not be applicable in its entirety, and sampling for UHCs would be necessary. It should be noted that the ABCDF hydrolyzate did not have to comply with Land Disposal Restriction oversight because this residual was treated in an exempt, permitted Clean Water Act unit (a large POTW). Some of the Underlying Hazardous Constituents found in mustard hydrolyzate from the ABCDF facility include the following:

Acetone	Hexachlorobenzene	1,1,1-Tichloroethane
Benzene	Hexachlorbutadiene	1,1,2-Trichloroethane
Carbon Tetrachloride	Hexachloroethane	1,1,1,2-Tetrachloroethane
Chlorobenzene	Methylene Chloride	1,1,2,2-Tetrachloroethane
2,4-Dinitrotoluene	Napthalene	Toluene
Ethylene Oxide	Nitrobenzene	.
Ethyl Ether	Pentachlorophenol	.

Thus, it is acknowledged that the assignment of a list of applicable UHCs pertain only to the mustard and to treatment residuals generated by a specific process. If, as has already been discovered, a different and distinguishable process is used to decontaminate mustard, other characteristics may be exhibited which need to be added to the treatment residuals, and/or the UHC list modified to account for all of the chemicals found from sampling. Specifically, the mustard calibration standards used in the laboratory at PCD are treated by the addition of sodium hypochlorite to hexane containing known quantities of mustard. When this approach is used, Chloroform is synthesized as a disinfection by-product in the treatment residual, and depending upon the treatment recipe, mass loading, and operational controls, the residual may also exhibit the D022 characteristic for Chloroform. If Chloroform is present at a concentration less than the regulatory threshold for D022 at 6 ppm in a TCLP extract, it may be a UHC with its own treatment standard. Regarding these facts, it is clear that there is a distinct advantage to delineating these mustard waste forms, their associated codes, and the treatment standards that are applicable for the benefit of the Army, the Division, and the Commission.

Generators of Hazardous Waste are required to meet the applicable standards for UHCs for their characteristic hazardous waste, and if process knowledge is lacking, regarding the presence and concentrations of UHCs, sampling is required for the 250+ UHCs in the Universal Treatment Standards Table found at § 268.48. For each process applied to mustard, the mustard residuals must be sampled because the process knowledge with regard to UHCs is not fundamentally defined.

Land Disposal Restrictions applicable to Mustard and Mustard Waste Forms

This rulemaking incorporates the aforementioned mustard listing revisions into § 261.32(a) (Hazardous Waste from Specific Sources), into Appendix VII of Part 261 (Basis for Listing Hazardous Waste), and into § 268.40 (Treatment Standards for Hazardous Waste).

These amendments are more stringent than the federal regulations, which do not contain federal analogs to the state-only K901, K902, P909, and P910 mustard agent listings related to military munitions. The Commission finds that there is substantial evidence in the record that these rules are necessary to protect the public health and the environment of the state. The Commission's findings are based upon its evaluation of the public health and environmental information and studies contained in the rulemaking record, the Statement of Basis and Purpose, and testimony presented at the hearing. Pursuant to C.R.S. section 25-15-302 (4)(a), these findings were approved by more than six members of the Commission.

Statement of Basis and Purpose - Rulemaking Hearing of February 16, 2010

8.72 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 261 and 273 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Universal Waste Amendments

These amendments to Parts 261 and 273 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) clarify the scope of the Part 273 regulations and amend the waste management standards for small and large quantity handlers of universal waste.

The Part 273 Universal Waste Regulations include certain hazardous wastes that are commonly generated by a wide variety of generators, including retail and commercial businesses, government agencies and schools. Colorado’s Part 273 Universal Waste Regulations include management standards for batteries, pesticides, mercury-containing devices, aerosol cans, lamps, electronic devices and electronic components.

The Part 273 regulations provide an alternative set of reduced management standards that a generator can follow instead of the full hazardous waste requirements of the Colorado Hazardous Waste Regulations. The Part 273 regulations were designed to reduce the regulatory burden on non-residential entities that generate these universal wastes and to encourage recycling, while at the same time reducing the amount of hazardous waste items illegally sent to municipal solid waste landfills, thus reducing a potential threat to public health and the environment. Although these same wastes are not regulated as hazardous wastes if generated by residential consumers, the Division encourages households to recycle these wastes, or dispose of them through a local household hazardous waste collection event or facility.

The amendments being adopted at this time include:

1) Modifying § 261.9(a) and § 273.1 (b) to clarify that if a waste handler chooses to manage their universal waste under the Part 273 Regulations, but fails to meet those requirements, the waste handler remains subject to, and must comply with, all applicable requirements of the Colorado Hazardous Waste Regulations (6 CCR 1007-3), Parts 260 through 268, 99, and 100. The Division has recently inspected several facilities that were not managing their universal wastes in compliance with the universal waste rules. These facilities did not understand that this made them subject to the hazardous waste rules in Parts 260 through 268, 99, and 100.

2) Correcting a typographical error in paragraphs (i) and (ii) of § 273.2(d)(2) by replacing the reference to § 273.6 with the proper cite reference of § 273.9.

3) Revising the definition of “Electronic component” in § 273.9 by removing the last sentence regarding intact devices. Since this rule was promulgated, the University of Florida conducted toxicity tests on other electronic devices like CPUs, cell phones and VCRs. These tests indicated that many intact electronic devices would likely fail the toxicity test for lead, mainly due to the circuit boards and other soldered components in the devices.

4) Revising the waste management standards in § 273.13 and § 273.33 for small and large quantity handlers of universal waste by:

    a. Amending § 273.13(e)(1) and § 273.33(e)(1) to specify that small and large quantity handlers of universal waste lamps must contain the lamps in “appropriately-sized” containers to prevent breakage of the lamps and the release of mercury.

    b. Amending § 273.13(f)(3)(iv) and § 273.33(f)(3)(iv) to incorporate the applicable container management requirements of § 262.34 by specifying that universal waste handlers of electronic devices who disassemble the electronic devices must transfer the disassembled electronic components directly into containers that are structurally sound and are compatible with the material.

    c. Amending § 273.13(f) and § 273.33(f) to add conditions (f)(5) through (f)(5)(v) for handlers conducting shredding, crushing, or other size-reduction activities of electronic devices to reduce their volume or make them more suitable for recycling or reclamation. This section is being amended to allow current industry practices of shredding hard drives, performing laser separation of CRT panel glass from funnel glass, and crushing CRT glass. These practices were not common at the time the regulations were originally promulgated.

As part of the waste management standards of § § 273.13(f) and 273.33(f), handlers who conduct shredding, crushing, or other size-reduction activities of electronic devices to reduce their volume or make them more suitable for recycling or reclamation would not require a permit for treatment of hazardous waste provided the handler:

1) Ensures that the universal waste electronic devices are size-reduced in a manner designed to prevent the release of any universal waste or component of universal waste to the environment;

2) Ensures that the size-reduction operations are performed safely by developing and implementing a written procedure detailing how to safely size-reduce each universal waste electronic device managed at the facility. This procedure must include: the type of equipment to be used to size-reduce the universal waste electronic devices safely; operation and maintenance of all equipment; proper waste management practices, and waste characterization;

3) Transfers the size-reduced material directly into containers that are structurally sound and are compatible with the material;

4) Ensures that employees are thoroughly familiar with the procedures for size-reduction of the universal waste electronic devices, proper waste handling, and emergency procedures relevant to their responsibilities during normal facility operations and emergencies; and

5) Maintains a system to ensure compliance with the written size-reduction and management procedures for the universal waste electronic devices.

Handlers of universal waste who disassemble electronic devices into components, or who generate other solid waste as a result of such activities must determine whether the separated components and/or other solid wastes exhibit a characteristic of hazardous waste. If the separated electronic components or other solid wastes generated exhibit a characteristic of hazardous waste, they must be managed in compliance with all applicable requirements of Parts 260 through 268, and Parts 99 and 100 of the Colorado Hazardous Waste Regulations 6 CCR 1007-3. Alternatively, separated electronic components generated may continue to be managed as universal wastes under Part 273. If the separated electronic components do not exhibit a characteristic of hazardous waste, they are not subject to the hazardous waste requirements, nor are they subject to the requirements of Part 273. This waste is, however, required to be handled in compliance with applicable federal, state, and local solid waste regulations.

Additional guidance on the Part 273 Universal Waste Regulations, and the management of electronic wastes, is available on the Division's website at http://www.cdphe.state.co.us/hm/hw/hwpubs.htm.

Statement of Basis and Purpose - Rulemaking Hearing of May 18, 2010

8.73 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 6 is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-314(1), C.R.S.

Amendment of § 6.04 Annual Commission Fee

Section 6.04 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) is being amended at this time by revising paragraph (a) to reflect the annual Commission fee to be assessed for fiscal year 2010-2011.

Statement of Basis and Purpose - Rulemaking Hearing of May 18, 2010

8.73 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260 and 268 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Correction of Errors and Inadvertent Omissions

These amendments correct errors and inadvertent omissions which exist in the Table of Contents for Part 260, and the K901 listings in the table at § 268.40 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3).

The amendments being adopted at this time include:

1) Revising the Table of Contents for Part 260 to add a listing for § 260.34 Standards and Criteria for Non-waste Confirmations. A listing for § 260.34 in the Table of Contents for Part 260 was inadvertently omitted and not included as part of the § 260.34 Standards and Criteria for Non-waste Confirmations rulemaking adopted by the Solid and Hazardous Waste Commission at the February 16, 2010 Hearing.

2) Revising the text of the waste descriptions for the K901 listings in the table at § 268.40 by changing the phrase "up to the point in the PCAPP process where the acidic hydrolyzate is manipulated to a sustained and stable pH > 12.5 to ensure destruction of sulfonium ions and TDG-mustard aggregates, prior to transfer from reactor." to read "up to the point in the PCAPP process where the acidic hydrolyzate is manipulated to a sustained and stable pH > 10 to ensure destruction of sulfonium ions and TDG-mustard aggregates, prior to transfer from reactor." In its response to comments received on the Mustard Agent Amendments rulemaking, the Hazardous Materials and Waste Management Division agreed with a proposed amendment to change the "pH > 12.5" reference in the K901 listings to "pH > 10" as long as the pH is adjusted to 10 and sustained. This change was inadvertently omitted and not included as part of the Mustard Agent Amendments adopted by the Solid and Hazardous Waste Commission at the February 16, 2010 Hearing.

Statement of Basis and Purpose - Rulemaking Hearing of May 18, 2010

8.73 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 263 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Transfer Facility Amendments

These amendments to Part 263 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) revise the existing standards applicable to transporters of hazardous waste in Colorado by amending the requirements applicable to transfer facilities located in the state.

These amendments were developed as part of a review of the Part 263 regulations conducted by the Hazardous Materials and Waste Management Division (the "Division") for the purpose of updating and improving the existing regulations that apply to transfer facilities in Colorado in order to ensure protection of public health and safety and the environment. Input from key stakeholders, including eight transfer facilities and representatives of the Colorado Emergency Planning Commission and the South Metro Fire Rescue Authority were also incorporated into the development of these regulations.

The Division's review of the Part 263 regulations was initiated by a request from the Solid and Hazardous Waste Commission following a February 2009 briefing regarding a fire that occurred on October 5, 2006 at the Environmental Quality Co. (EQ) hazardous waste transfer facility in Apex, North Carolina. Mr. William Wright of the United States Chemical Safety and Hazard Investigation Board (CSB) provided a presentation on the North Carolina Apex Incident at the February 17, 2009 Commission hearing. The CSB conducted a formal investigation into the fire, and published a case study, *Fire and Community Evacuation in Apex, North Carolina* (2007-01-I-NC, April 16, 2008, which is available online at http://www.csb.gov/assets/document/EQFinalReport.pdf). The amendments in this rulemaking upgrade transfer facility requirements so as to prevent or enable more effective response to a similar incident in Colorado. In general, transfer facilities are lightly regulated under the hazardous waste regulations; these amendments require certain operational improvements at transfer facilities without creating an undue regulatory burden.

The major amendments being adopted at this time include:

1) Revising the scope of the Part 263 Regulations in § 263.10(a) to specify that the Part 263 standards apply to all persons: a) transporting hazardous waste within Colorado; b) storing hazardous waste at a transfer facility located in Colorado; or c) transferring a hazardous waste from one container to another at a transfer facility located in Colorado.

2) Adding a new paragraph (b) in § 263.10 to specify that transfer facilities handling only conditionally exempt small quantity generator (CESQG) waste are subject to the requirements of Subparts A (General Requirements), C (Hazardous Waste Discharges), D (Spills at Transfer Facilities) and E (Closure of a Transfer Facility). Transfer facilities handling only CESQG waste are not subject to the manifest requirements in Subpart B.

3) Revising § 263.12 to specify the general standards that are applicable to all transfer facilities, and adding further clarification and new requirements regarding:

    a) Documentation of storage. The owner or operator of a transfer facility must maintain documentation to verify that the ten-day storage requirement of § 263.12(b) has been met.

    b) Weekly inspections/record of inspection. The owner or operator must conduct weekly inspections of all areas where containers are stored, and maintain written records of the results of the inspection, including, at a minimum, any evidence of container failure, the condition of secondary containment (if applicable) and remediation correcting any problems noted. The owner or operator will maintain the written records of these weekly inspections for a period of at least three years from the date of inspection. This requirement shall not apply to the interior of trucks or trailers where containers are stored, so long as those trucks or trailers were loaded in accordance with DOT regulations.

    c) Base/floor requirements. Loading docks, temporary container storage areas, and all areas where transfer of hazardous wastes occurs must have a base or floor that is smooth, free of cracks or gaps, and sufficiently impervious to contain leaks or spills until the spilled material is detected and removed. This requirement shall not apply to trucks or trailers that were loaded in accordance with DOT regulations.

    d) Truck/trailer storage requirements. For hazardous waste stored in trucks or trailers, the truck/trailer must be stored on a manmade surface that is capable of containing spills or releases to the ground. Any leaks or spills that do occur must be promptly cleaned up by the transfer facility operator.

e) Arrangements with local authorities. The transporter must contact local authorities to make arrangements to familiarize local first responders with the layout of the transfer facility, NFPA hazardous class of hazardous waste handled at the transfer facility and other relevant information. Transporters shall document attempts to make such arrangements, and shall document any case where State or local authorities decline to enter into such arrangements.

f) Security. All transfer facilities must be adequately fenced or secured to control public access and prevent unauthorized access to areas of hazardous waste storage. For a truck/trailer parked at a transfer facility that has no 24-hour surveillance system or artificial or natural barrier, the truck/trailer must meet the placarding requirements of 49 CFR Part 172 and the hazardous waste must be secured (i.e., locked) or the shipment of hazardous waste must be transferred to a secured area of the facility to prevent unknown entry and minimize unauthorized access.

g) Signage. A sign with the legend, "Danger – Unauthorized Personnel Keep Out," or a similar warning, in English and any other language predominant in the area, must be posted around the facility, and must be legible from a distance of at least 25 feet. For storage of hazardous waste on trucks or trailers, the truck/trailer must meet the applicable placarding requirements of 49 CFR Part 172.

h) Emergency preparedness, prevention, and response. Expansion of emergency coordinator, communication, and fire and spill related requirements previously applicable to some transfer facility owners and operators to all such facilities.

4) Adding closure requirements for transfer facilities as § 263.41 in Subpart E of Part 263. The lack of closure requirements in previous regulations could create confusion as to the obligations of transfer facility owners. The closure requirements include reference to § 265.111 (Closure performance standard) and § 265.114 (Disposal or decontamination of equipment, structures and soils). All closure activities must be completed within 90 days after receiving the final volume of hazardous wastes at the facility. Within 60 days of completion of closure of the transfer facility, the owner or operator must submit to the Department, by registered mail, a certification that all hazardous wastes have been removed from the facility, properly disposed of, and that the facility has been closed in accordance with the performance standards of § 265.111 and § 265.114.

These amendments are more stringent than the federal regulations. The Commission has evaluated the information presented at the rulemaking hearing, as well as the information in the Statement of Basis and Purpose. The Commission considers this information sufficient to justify adopting the proposed rule. The Commission finds that this rule is necessary to protect public health and the environment.

Statement of Basis and Purpose - Rulemaking Hearing of November 16, 2010

8.74 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 100 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of § 100.63 and Appendix I to § 100.63

These amendments to Part 100 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) remove the permit modification provisions for EPA Performance Track member facilities that currently exist in § 100.63 and Appendix I to § 100.63.

These provisions were inadvertently excluded from the amendments adopted by the Commission on August 18, 2009 to remove the extended accumulation time requirements and reduced inspection frequency requirements previously available to members of both Colorado's Environmental Leadership Program and the U.S. Environmental Protection Agency's (EPA's) National Environmental Performance Track program.

The Commission's adoption of the August 2009 amendments became necessary following EPA's decision to terminate the federal Performance Track Program effective May 14, 2009. A notice announcing EPA's decision to terminate the Performance Track Program was published in the Federal Register on May 14, 2009 [74 FR 22741-22742].

Paragraph 3 of Subsection O (Burden Reduction) in Appendix I to § 100.63 is also being amended at this time to delete and reserve the paragraph. The recordkeeping and reporting requirements pursuant to the specific regulatory citations listed in paragraph 3 were amended by the RCRA Burden Reduction Initiative Amendments adopted by the Commission on May 15, 2007 and are no longer applicable.

Statement of Basis and Purpose - Rulemaking Hearing of February 15, 2011

8.75 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 262 and Part 100 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § § 25-15-302(2) and (3.5), C.R.S.

Amendments to Hazardous Waste Fees

After two years under the present hazardous waste fee structure, the Department has determined that a one-year temporary **decrease** of 12% in hazardous waste fees is necessary for Calendar Year 2011.

§ 25-15-301.5, C.R.S., provides general directives for implementation of the hazardous waste regulatory program. These directives include implementing a hazardous waste program that a) maintains program authorization by the U.S. EPA, b) promotes a community ethic to reduce or eliminate waste problems, c) is credible and accountable to industry and the public, d) is innovative and cost-effective, and e) protects the environmental quality of life for impacted residents of the state. § 25-15-302(2), C.R.S., provides guidance for future fee adjustments by the Solid and Hazardous Waste Commission. This guidance includes setting the fees such that the revenue generated by each fee approximates the actual reasonable program costs attributable to the facilities paying the fee.

The Department is authorized by the U.S. EPA to operate the hazardous waste regulatory program in Colorado in lieu of the federal government. One of the key criteria evaluated by the U.S. EPA in authorizing the state program is resources, both in terms of funding and in terms of qualified personnel.

Even with this fee decrease, the Department has determined that it will continue to be able to operate an adequate program.

Amendments to these same sections of the regulations made in May, 2009, implemented a balanced 15% increase in hazardous waste program fees that the Department expected would provide adequate funding for the hazardous waste program for a period of approximately two years. However, because of several unanticipated events, the current fee structure has collected too much money. The Department has benefitted from higher-than-anticipated revenue and lower-than-expected costs. Revenues have been higher due to 1) greater-than-expected volumes processed by Colorado's permitted Treatment, Storage, and Disposal (TSD) facilities, 2) collecting a sizable hazardous waste volume fee for a new waste stream at another TSD, and 3) other fee components (number of billable hours and number of hazardous waste generators) remaining stronger than anticipated.

The Hazardous Waste Program has had lower expenses because 1) salaries have not been increased in FY10 or FY11, 2) we expect salaries to remain flat in FY12, 3) salaries were actually cut ~2% in FY10 due to furloughs and cut 2.5% in FY11 by legislative action diverting more salary to PERA (the retirement program for state employees) and decreasing the amount paid by the state the same amount, and 4) the Hazardous Waste Program has not spent the budgeted $200,000 that we built into the 2009 fee increase for building a new data management system.

Higher revenues and lower expenses have caused overall revenue to outpace expenses in both FY10 and FY11. This has caused the Program's bank account to grow to a level that significantly exceeds what is allowed by law. § 24-75-402, C.R.S., requires that the fiscal-year end balance in this type of bank account not exceed 16.5% of the previous year's expenditures. Because of the unanticipated events described above, projections show that the 16.5% carry-over limit will be exceeded until FY15 unless the fees are decreased. With a fee decrease the bank account balance will again reach the 16.5% limit in FY13.

This fee decrease rulemaking will become effective on April 1, 2011. However, because of how these rules are written, the new decreased fees will actually be retroactive to January 1, 2011 and will continue through December 31, 2011. Because the Department does not collect any fees for calendar year 2011 until after April 1, 2011, when 1st quarter document review fees and CESQG annual fees will be billed, the retroactive aspect of the fee decrease should cause no problems for the Department or for fee payers.

The amendments being adopted at this time include a one-year temporary fee decrease of 12% for all fee components. The 2009 fee increase was calculated carefully to collect proportional amounts of revenue from each hazardous waste sector equivalent to the amount of time and effort the Department spent regulating that sector. That proportion between sectors is still correct and, therefore, the fairest and simplest approach to the fee decrease is an across-the-board equal fee reduction of 12%. This means that the fees included in Parts 262.13 (Generator fees), 100.31 (TSD annual, volume, and minimum fees), 100.32 (document review and activity fees), and 100.33 (notification fees) have all been reduced by 12% for calendar year 2011.

The maximum and ceilings for non-commercial TSDs in Part 100.31(b) and for document review in Parts 100.32(b) and (c) have not been adjusted. These ceilings were not raised in 2009 when the last fee increase (15%) was implemented so there is no reason to lower them now for this fee decrease. In truth, these ceilings are only very rarely reached even under the 2009 fee amounts.

Statement of Basis and Purpose - Rulemaking Hearing of May 17, 2011

8.76 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 99, 101, 6 and 7 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment to Change "Hazardous Waste Commission" References to "Solid and Hazardous Waste Commission"

In 2006, as a result of Senate Bill 06-171, the Hazardous Waste Commission was renamed the Solid and Hazardous Waste Commission and assumed rulemaking responsibilities from the State Board of Health over solid waste. These amendments to the Colorado Hazardous Waste Regulations, 6 CCR 1007-3, Parts 260, 99, 101, 6 and 7 are made to reflect this name change.

Statement of Basis and Purpose - Rulemaking Hearing of May 17, 2011

8.76 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 6 is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-314(1), C.R.S.

Amendment of § 6.04 Annual Commission Fee

Section 6.04 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) is being amended at this time by revising paragraph (a) to reflect the annual Commission fee to be assessed for fiscal year 2011-2012.

Statement of Basis and Purpose - Rulemaking Hearing of August 16, 2011

8.77 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 262, 263, 264, 265 and 267 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Revisions to the OECD Requirements for Export Shipments of Spent Lead-Acid Batteries

These amendments implement recent changes to the agreements concerning the transboundary movement of hazardous waste among countries belonging to the Organization for Economic Cooperation and Development (OECD), establish notice and consent requirements for spent lead-acid batteries intended for reclamation in a foreign country, specify that all exception reports concerning hazardous waste exports be sent to the International Compliance and Assurance Division in the Office of Enforcement and Compliance Assurance's Office of Federal Activities in Washington, D.C., and require U.S. receiving facilities to match EPA-provided import consent documentation to incoming hazardous waste import shipments and to submit to EPA a copy of the matched import consent documentation and RCRA hazardous waste manifest for each import shipment.

This rule amends certain existing regulations promulgated under the hazardous waste provisions of the Resource Conservation and Recovery Act (RCRA) regarding hazardous waste exports from and imports into the United States. Specifically, the amendments implement recent changes to the agreements concerning the transboundary movement of hazardous waste among countries belonging to the Organization for Economic Cooperation and Development (OECD), establish notice and consent requirements for spent lead-acid batteries intended for reclamation in a foreign country, specify that all exception reports concerning hazardous waste exports be sent to the International Compliance and Assurance Division in the Office of Enforcement and Compliance Assurance's Office of Federal Activities in Washington, DC, and require U.S. receiving facilities to match EPA-provided import consent documentation to incoming hazardous waste import shipments and to submit to EPA a copy of the matched import consent documentation and RCRA hazardous waste manifest for each import shipment.

Because of the Federal government's special role in matters of foreign policy, EPA does not authorize States to administer Federal import/export functions in any section of the RCRA hazardous waste regulations. Although States do not receive authorization to administer the Federal government's export functions in 40 CFR part 262, subpart E, import functions in 40 CFR part 262, subpart F, import/export functions in 40 CFR part 262, subpart H, or the import/export related functions in any other section of the RCRA hazardous waste regulations, State programs are still required to adopt state analogs to those provisions in the January 8, 2010 federal rule that are more stringent than existing federal requirements in order to maintain their equivalency with the federal program. These provisions provide state equivalency with the more stringent federal provisions.

This Basis and Purpose incorporates by reference the applicable portions of the preamble language for the EPA regulations as published in the Federal Register at 75 FR 1236-1262, January 8, 2010. This Basis and Purpose also incorporates by reference the applicable portions of the preamble language for Sections 262.53 and 262.56 of the EPA regulations as published in the Federal Register at 71 FR 40254-40280, July 14, 2006.

Statement of Basis and Purpose - Rulemaking Hearing of August 16, 2011

8.77 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 262, 264 and 265 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of Manifest Regulations

These amendments correct certain omissions and an error in the manifest regulations adopted by the Solid and Hazardous Waste Commission on May 16, 2006.

On May 16, 2006, the Commission adopted state analogs to the federal manifest rule that was published in the Federal Register on March 4, 2005 [70 FR 10776]. The March 2005 manifest rule (manifest rule) inadvertently omitted certain requirements that were intended for inclusion, and that relate to the use of a manifest in shipments of rejected hazardous wastes or non-empty containers containing regulated residues ("container residues"). In addition, the manifest rule contained an error regarding a designated facility's preparation of a new manifest in certain returned shipment situations.

On March 18, 2010, the Environmental Protection Agency published a final rule in the Federal Register [75 FR 12989-13009] to correct these and other additional omissions and errors that exist in the federal regulations. Today's amendments adopt state analogs to these March 2010 federal provisions.

The amendments being adopted at this time include the following:

1) Addition of § 262.23(f) – The generator must sign and date the manifest accompanying the returned shipment of rejected hazardous wastes or container residues, provide the transporter with a copy of the manifest, and retain a copy of the manifest for three years.

2) Addition of § 262.42(d) – The generator must comply with the Exception reporting requirements of § 262.42(a) or (b) when a designated facility forwards its hazardous waste or container residues to an alternate facility under a new manifest.

3) Revision of § 264.72(e)(6) and § 265.72(e)(6) – The designated facility must mail to the generator a signed copy of the new manifest included with the shipments of rejected loads or container residues that are re-shipped to an alternate facility by the designated facility under a new manifest.

4) Revision of § 264.72(f)(1) and § 265.72(f)(1) – The designated facility must enter its own information (instead of the generator's information) in Item 5 of the new manifest form when it originates the shipments of rejected hazardous waste or container residues.

5) Revision of § 264.72(f)(7) and § 265.72(f)(7) – A designated facility using the original manifest need not comply with new paragraph (8).

6) Addition of § 264.72(f)(8) and § 265.72(f)(8) – The designated facility using a new manifest to return a full load or partial load of rejected hazardous wastes, or container residues, to the generator must comply with the exception reporting provisions of § 262.42(a).

As an authorized state, Colorado is required to adopt the revisions to § 262.23 in accordance with the consistency requirements in 40 CFR § 271.4(c). The remaining amendments are considered to be neither more or less stringent than the current standards, and Colorado is not required to modify its regulations to adopt these technical corrections.

This Basis and Purpose incorporates by reference the applicable portions of the preamble language for the EPA regulations as published in the Federal Register at 75 FR 12989-13009, March 18, 2010.

Statement of Basis and Purpose - Rulemaking Hearing of August 16, 2011

8.77 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 100 and 260 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of § 100.32(a)(1)(xii) & Addition of "Environmental use restriction" and "Notice of environmental use restriction" definitions to § 260.10

These proposed amendments are a clarifying change to the document review regulations. The regulations currently allow the Department to charge document review fees for time spent reviewing, evaluating and responding to "documents submitted or required to be submitted in connection with" certain specified subjects, including "Environmental Covenants or documents required under § 25-15-320(3), C.R.S." 6 CCR 1007-3, § 100.32(a)(1)(xii). This regulation was adopted before certain statutory amendments to the Environmental Covenant statute. Those amendments created an alternative mechanism to an environmental covenant called a "notice of environmental use restrictions." While the language of the existing regulation is broad enough to include notices of environmental use restrictions (as they are submitted as an alternative to an environmental covenant in cases where a covenant would otherwise be required), expressly including the term removes any confusion that may exist on this point.

Definitions of "Environmental use restriction" and "Notice of environmental use restriction" are also being added to § 260.10 of the Regulations as part of this rulemaking.

Statement of Basis and Purpose - Rulemaking Hearing of November 15, 2011

8.78 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 262 and Part 100 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § § 25-15-302(2) and (3.5), C.R.S.

Amendments to Hazardous Waste Fees

The Solid and Hazardous Waste Commission put the current fees in place in 2009. After two years under the present hazardous waste fee structure, the Department determined that a one-year temporary decrease of 12% in hazardous waste fees was necessary for Calendar Year 2011. After further review, the Department has determined that a **one-year temporary decrease of 30%** in hazardous waste fees is necessary for Calendar Year 2012.

§ 25-15-301.5, C.R.S., provides general directives for implementation of the hazardous waste regulatory program. These directives include implementing a hazardous waste program that a) maintains program authorization by the U.S. EPA, b) promotes a community ethic to reduce or eliminate waste problems, c) is credible and accountable to industry and the public, d) is innovative and cost-effective, and e) protects the environmental quality of life for impacted residents of the state. § 25-15-302(2), C.R.S., provides guidance for future fee adjustments by the Solid and Hazardous Waste Commission. This guidance includes setting the fees such that the revenue generated by each fee approximates the actual reasonable program costs attributable to the facilities paying the fee.

The Department is authorized by the U.S. EPA to operate the hazardous waste regulatory program in Colorado in lieu of the federal government. One of the key criteria evaluated by the U.S. EPA in authorizing the state program is resources, both in terms of funding and in terms of qualified personnel.

Even with this fee decrease, the Department has determined that it will continue to be able to operate an adequate program.

Amendments to these same sections of the regulations made in May, 2009 implemented a balanced 15% increase in hazardous waste program fees that the Department expected would provide adequate funding for the hazardous waste program for a period of approximately two years. However, because of several unanticipated events, the current fee structure has collected too much money. The Department has benefitted from higher-than-anticipated revenue and lower-than-expected costs. Revenues have been higher due to 1) greater-than-expected volumes processed by Colorado's permitted Treatment, Storage, and Disposal (TSD) facilities, 2) collecting a sizable hazardous waste volume fee for a new waste stream at another TSD, and 3) other fee components (number of billable hours and number of hazardous waste generators) remaining stronger than anticipated.

The Hazardous Waste Program has had lower expenses because 1) salaries did not increase in FY10 or FY11 and will not increase in FY12, 2) salaries were actually cut 2.5% in FY11 and FY12 by legislative action diverting more salary to PERA (the retirement program for state employees) and decreasing the amount paid by the state the same amount, 3) the Hazardous Waste Program has not spent the budgeted $200,000 that we built into the 2009 fee increase for building a new data management system, 4) the Hazardous Waste Program did not have to pay attorney costs out of the cash account in FY11, and 5) the Hazardous Waste Program lost ~4 FTE in FY11 due to some minor reorganization and movement of time and effort over to the Solid Waste Program.

Higher revenues and lower expenses have caused overall revenue to outpace expenses in both FY10 and FY11. This has caused the Program's bank account to grow to a level that significantly exceeds what is allowed by law. § 24-75-402, C.R.S., requires that the fiscal-year end balance in this type of bank account not exceed 16.5% of the previous year's expenditures. Because of the unanticipated events described above, projections show that the 16.5% carry-over limit will be exceeded until beyond FY15 unless the fees are decreased. With a fee decrease the bank account balance will again reach the 16.5% limit in FY15.

This fee decrease rulemaking will become effective on January 1, 2012.

The amendments being adopted at this time include a one-year temporary fee decrease of 30% for all fee components. The 2009 fee increase was calculated carefully to collect proportional amounts of revenue from each hazardous waste sector equivalent to the amount of time and effort the Department spent regulating that sector. That proportion between sectors is still correct and, therefore, the fairest and simplest approach to the fee decrease is an across-the-board equal fee reduction of 30%. This means that the fees included in Parts 262.13 (Generator fees), 100.31 (TSD annual, volume, and minimum fees), 100.32 (document review and activity fees), and 100.33 (notification fees) have all been reduced by 30% for calendar year 2012.

The maximum and ceilings for non-commercial TSDs in Part 100.31(b) and for document review in Parts 100.32(b) and (c) have not been adjusted. These ceilings were not raised in 2009 when the last fee increase (15%) was implemented so there is no reason to lower them now for this fee decrease. In truth, these ceilings are only very rarely reached even under the 2009 fee amounts.

Statement of Basis and Purpose - Rulemaking Hearing of May 15, 2012

8.79 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 6 is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-314(1), C.R.S.

Amendment of § 6.04 Annual Commission Fee

Section 6.04 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) is being amended at this time by revising paragraph (a) to reflect the annual Commission fee to be assessed for fiscal year 2012-2013.

Statement of Basis and Purpose - Rulemaking Hearing of November 20, 2012

8.80 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 99 is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of Paragraph (e) of the Part 99 Notification Regulations

This amendment modifies paragraph (e) of the Part 99 Notification regulations of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) to clarify that persons who have previously filed a notification of regulated waste activity with the Department or EPA are required to file an updated notification with the Department whenever the generator status of such persons change. This amendment also eliminates the option to delay filing the updated notification until such time as the Solid and Hazardous Waste Commission Fee is due pursuant to 6 CCR 1007-3, § 6.04.

Under the current requirements of Part 99(e), persons who have previously filed a notification of regulated waste activity with the Department or EPA are required to file an updated notification with the Department whenever the location and/or general description of their activities change. No updated notification is required solely for changes in the identified or listed hazardous wastes handled at the facility. The updated notification, if necessary, is currently required to be filed annually at the time the Solid and Hazardous Waste Commission Fee is due in September.

Since this Part 99(e) was last modified, regulations have been added to Part 262.13 that assess generator annual fees based on the facility's notification status. Recognizing that a generator's status may change throughout a calendar year, notes were added that generators operating at a higher generator status for four or more calendar months of the year would be assessed at the higher status fee level. As Part 99(e) is currently written, a generator with increased episodic generation of hazardous waste that elevates their status to a higher generator level is not required to file an updated notification with the Department until September 15th of that year. If the facility's generator status increases four or more times early in the year, their status may have already returned to the lower generator category by the time the annual Solid and Hazardous Waste Commission fee is due.

To minimize the impact on generators, the Colorado Hazardous Waste Notification form has been modified to include the option to notify at the generator's primary generation status and to also identify if they are an episodic generator of four or more months or less than four months in a calendar year.

The Commission has evaluated the information presented at the rulemaking hearing, as well as the information in the Statement of Basis and Purpose. The Commission finds that this rule is necessary to protect the public health and the environment of the state.

Statement of Basis and Purpose - Rulemaking Hearing of November 20, 2012

8.80 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 262 and Part 100 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § § 25-15-302(2) and (3.5), C.R.S.

Amendments to Hazardous Waste Fees

The Solid and Hazardous Waste Commission put the current fees in place in 2009. After two years under that hazardous waste fee structure, the Department determined that a one-year temporary decrease of 12% in hazardous waste fees was necessary for Calendar Year 2011. After further review, the Department determined that an additional one-year temporary decrease of 30% in hazardous waste fees was necessary for Calendar Year 2012. At that time, the Department suspected that the 30% fee reduction could possibly be extended into Calendar Year 2013 and maybe even further. However, due to an uncertain economy and the resulting difficult revenue and cost projections, the 30% fee reduction was only included in the regulations for Calendar Year 2012. After additional analysis, the budget for the Hazardous Waste Program remains healthy and our projections have been accurate, so this rulemaking extends the fee reduction for another year, Calendar Year 2013.

§25-15-301.5, C.R.S., provides general directives for implementation of the hazardous waste regulatory program. These directives include implementing a hazardous waste program that a) maintains program authorization by the U.S. EPA, b) promotes a community ethic to reduce or eliminate waste problems, c) is credible and accountable to industry and the public, d) is innovative and cost-effective, and e) protects the environmental quality of life for impacted residents of the state. § 25-15-302(2), C.R.S., provides guidance for future fee adjustments by the Solid and Hazardous Waste Commission. This guidance includes setting the fees such that the revenue generated by each fee approximates the actual reasonable program costs attributable to the facilities paying the fee.

The Department is authorized by the U.S. EPA to operate the hazardous waste regulatory program in Colorado in lieu of the federal government. One of the key criteria evaluated by the U.S. EPA in authorizing the state program is resources, both in terms of funding and in terms of qualified personnel.

Even with this fee decrease, the Department has determined that it will continue to be able to operate an adequate program.

Amendments to these same sections of the regulations made in May, 2009, effective July 1, 2009, implemented a balanced 15% increase in hazardous waste program fees that the Department expected would provide adequate funding for the hazardous waste program for a period of approximately two years. However, because of several unanticipated events, the current fee structure has collected too much money. The Department has benefitted from higher-than-anticipated revenue, particularly in 2011, and lower-than-expected costs. Revenues have been higher due to 1) greater-than-expected volumes processed by Colorado's permitted Treatment, Storage, and Disposal (TSD) facilities, 2) collecting a sizable hazardous waste volume fee for a new waste stream at another TSD, and 3) other fee components (number of billable hours and number of hazardous waste generators) remaining stronger than anticipated.

The Hazardous Waste Program has had lower expenses because 1) salaries did not increase in FY10, FY11, or FY12, and will not increase in FY13, 2) salaries were actually cut 2.5% in FY11 and FY12 by legislative action diverting more salary to PERA (the retirement program for state employees) and decreasing the amount paid by the state the same amount, 3) the Hazardous Waste Program has not spent the budgeted $200,000 that we built into the 2009 fee increase for building a new data management system, 4) the Hazardous Waste Program did not have to pay attorney costs out of the cash account in FY11 or FY12, and 5) the Hazardous Waste Program lost ~4 FTE in FY11 due to some minor reorganization and movement of time and effort over to the Solid Waste Program.

Higher revenues and lower expenses caused overall revenue to outpace expenses in both FY10 and FY11. In FY12, revenue and expenses were approximately equal. This has caused the Program's bank account to grow to a level that significantly exceeds what is allowed by law. § 24-75-402, C.R.S., requires that the fiscal-year end balance in this type of bank account not exceed 16.5% of the previous year's expenditures. Because of the unanticipated events described above, projections show that the 16.5% carry-over limit will be exceeded until beyond FY15 unless the fees are decreased. With a fee decrease the bank account balance will again reach the 16.5% limit in FY15.

This fee decrease rulemaking will become effective on January 1, 2013.

The amendments being adopted at this time include a second one-year temporary fee decrease of 30% for all fee components. The 2009 fee increase was calculated carefully to collect proportional amounts of revenue from each hazardous waste sector equivalent to the amount of time and effort the Department spent regulating that sector. That proportion between sectors is still correct and, therefore, the fairest and simplest approach to the fee decrease is an across-the-board equal fee reduction of 30%. This means that the fees included in Parts 262.13 (Generator fees), 100.31 (TSD annual, volume, and minimum fees), 100.32 (document review and activity fees), and 100.33 (notification fees) have all been reduced by 30% for calendar year 2013.

The maximum and ceilings for non-commercial TSDs in Part 100.31(b) and for document review in Parts 100.32(b) and (c) have not been adjusted. These ceilings were not raised in 2009 when the last fee increase (15%) was implemented so there is no reason to lower them now for this fee decrease. In truth, these ceilings are only very rarely reached even under the 2009 fee amounts.

Statement of Basis and Purpose - Rulemaking Hearing of November 20, 2012

8.80 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 261 is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of § 261.1(d)(4) Definition of "Reclaimed"

This amendment modifies the definition of "Reclaimed" in paragraph (d)(4) of § 261.1 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) by deleting the existing definition, and adopting a definition analogous to the federal definition found at 40 CFR § 261.1(c)(4).

The state definition of "reclaimed" was modified as part of the Legitimate Recycling Amendments adopted by the Commission on February 16, 2010. The Legitimate Recycling Amendments established hazardous waste recycling legitimacy criteria at § 261.2(f) for distinguishing legitimate recycling from "sham" recycling practices, and activities undertaken by an entity to avoid the requirements of managing a hazardous material as a hazardous waste. Because there are significant economic incentives to manage hazardous materials outside the RCRA regulatory system, there is a potential for some handlers to claim that they are recycling, when, in fact, they are conducting waste treatment, storage and /or disposal in the guise of recycling.

An unintended consequence resulting from the adoption of the revised § 261.1 definition of "reclaimed" is that the definition negatively impacts facilities that conduct multi-stage reclamation. Under the existing definition, multi-stage reclamation is precluded unless the recycling is conducted in accordance with permit-by-rule requirements for generator treatment in accordance with § 100.21(d) of the Regulations, which require compliance with the Part 262 requirements for accumulation tanks or containers, or in accordance with a permit.

For example, a Colorado company reclaims silver from photographic fixer solutions in a multi-step reclamation process. As § 261.1(d)(4) is currently written, the facility would have to upgrade the entire reclamation process to comply with the Subpart J tank standards, even though the entire process is already conducted within a secondary containment system.

Another Colorado company is planning to build a new facility for recycling off-specification solar panels. The proposed recycling process would include the following steps:

- Size reduction in a shredder followed by processing in a hammer mill;
- Film removal by treatment with acid and hydrogen peroxide;
- Solid liquid separation;
- Glass/laminate separation with a vibrating screen;
- Glass rinsing; and
- Metals precipitation and dewatering.

Under the current definition, this multi-stage recycling process would require a Part B permit, as many of the components would not meet the definition of a tank or container and would be considered miscellaneous units.

The adoption of this amendment provides consistency with the federal definition of “reclaimed” at 40 CFR § 261.1(c)(4), and removes the unintended consequence of requiring facilities conducting multi-stage reclamation to comply with the additional technical standards for accumulation tanks and containers.

Statement of Basis and Purpose - Rulemaking Hearing of November 20, 2012

8.80 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 261 is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of § 261.2(f)(1) Documentation of claims that materials are not solid wastes or are conditionally exempt from regulation

This amendment modifies paragraph (f)(1) of § 261.2 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) to clarify that any person conducting recycling must be able to demonstrate that the recycling is legitimate, irrespective of whether or not the Division is pursuing an enforcement action.

A person claiming that a waste is not a solid waste or that a waste is conditionally exempt from regulation (e.g., because it is recycled in accordance with § 261.2(e)) must be prepared to demonstrate that the conditions for the exclusion are being met. Generators must be able to provide documentation supporting their claim, such as proof the material is being reused in a production process or that there is a known market for the material (§ 261.2(f)). An example of appropriate documentation would include a contract showing that a second person uses the material as an ingredient in a production process. In addition, owners or operators of facilities claiming that they actually are recycling materials must show that they have the necessary equipment to do so.

In determining whether their recycling is legitimate, owners or operators must address the requirements in § 261.2(f)(2), which specify that legitimate recycling must involve a material that provides a useful contribution to the recycling process or to a product or intermediate of the recycling process, and the recycling process must produce a valuable product or intermediate. Materials that are not legitimately recycled are discarded and are solid waste.

This change will assist owners and operators in proactively maintaining documentation of claims that a material is not solid waste or is conditionally exempt from regulation rather than trying to re-create documentation retroactively as part of an enforcement action. This change may also potentially reduce the incidence of enforcement actions if documentation is readily available.

The Commission has evaluated the information presented at the rulemaking hearing, as well as the information in the Statement of Basis and Purpose. The Commission finds that this rule is necessary to protect the public health and the environment of the state.

Statement of Basis and Purpose - Rulemaking Hearing of November 20, 2012

8.80 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 261 and 268 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Addition of K903 (Hydrolysate) Listing

Introduction

These proposed amendments create a new hazardous waste listing for mustard agent hydrolysate to accurately reflect its chemical hazard. Hydrolysate is the aqueous waste resulting from the chemical neutralization, or “hydrolysis,” of Mustard Agent (K901) with the addition of copious amounts of water. Hydrolysate is a waste derived from the treatment of mustard agent that currently carries the existing K901 or K902 specific source hazardous waste listings for military munitions. Under the K901 or K902 hazardous waste listings for chemical weapons, any treatment residue of mustard agent, or any water contaminated through contact with mustard agent, is considered an acute hazardous waste (Hazard Code H), mandating restrictive regulatory requirements. The acute hazardous code associated with the military munitions waste listings is due to the presence of mustard agent, which is a carcinogen, mutagen and teratogen and capable of causing human health impacts at low concentrations. However, analytical characterization data as well as technical information for the mustard agent neutralization process that has recently become available indicates that once neutralized, and subsequently stabilized by increasing the pH of the derived waste to a sustained level greater than 10, hydrolysate waste no longer contains detectable concentrations of the agent. These amendments therefore propose to create a new listing for the hydrolysate waste, K903 that does not include the acute hazardous waste code. The new non-acute listing for this waste will allow for more regulatory flexibility in storage, treatment and management of the waste, and also ensure that the chemical hazard of the waste is properly designated during any subsequent transportation to a permitted treatment, storage or disposal facility.

Previous rulemakings for the K901 and K902 waste listings for mustard agent wastes (See 6 CCR 1007-3, § 8.46 and § 8.72) established the underlying basis for the listings which also include several other hazardous waste constituents in addition to mustard agent. These underlying hazardous waste constituents (UHCs) are present in the original agent due to manufacturing impurities or chemical degradation byproducts. While no mustard agent remains in the neutralized hydrolysate, the waste still retains diluted concentrations of UHCs that must be properly treated before the waste may ultimately be disposed of in a hazardous waste landfill. Additionally, the previous amendments to the K901 and K902 listings inadvertently included two hazardous waste constituents in the mustard agent waste that are not in it, and omitted two other constituents that are present in it at its point of generation. These amendments therefore also propose to add a land disposal restriction treatment standard for the K903 hydrolysate waste that retains Part 268 land disposal restriction treatment standards for all the UHCs present in the waste, including the two additional UHCs contained in it, to ensure it is properly treated prior to land disposal. The proposed amendments would also add the two additional constituents to the existing K901 and K902 listings in Part 268, and would remove the two inadvertently included constituents from the listings.

Specific Regulatory Amendments

The Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division (the Division) is proposing the following amendments to 6 CCR 1007-3:

1) Addition of a hazardous waste listing, K903 for hydrolysate, defined as the waste generated from the chemical neutralization of Mustard Agent with water, to the list of hazardous waste in Section 261.32 – "Hazardous Waste from Specific Sources" – Military Munitions

2) Addition of Hydrolysate to Part 261 Appendix VII – "Basis of Listing Hazardous Waste" for proposed K903 listing

3) Addition of a treatment standard for K903 hydrolysate waste generated from mustard agent (HD and HT) contained in all three configurations of munitions, including 105mm, 155mm, and 4.2 inch mortars to Part 268.40 following the point in the neutralization process where the hydrolysate is manipulated to a sustained and stable pH of greater than 10,

4) Removal of two hazardous constituents from the basis for the K901 and K902 hazardous waste listings, 1,4-dichlorobenzene and 2,4,6-trichlorophenol, from Parts 261, Appendix VII, and 268.40 that are not present in the mustard agent and that should not have been included in the original listings.

5) Addition of two hazardous constituents to the basis for the K901 and K902 hazardous waste listings, chloroform and hexachloroethane, to Parts 261, Appendix VII, and 268.40 that are present in the mustard agent and that should also be included in the original listings.

Mustard Agent Neutralization and Chemical Analysis of Hydrolysate

The Department of Defense and U.S. Army are currently pursuing treatment and destruction of over 750,000 waste chemical weapons stored at the Pueblo Chemical Depot (PCD). The chemical weapons inventory is composed of 105mm and 155mm projectiles and 4.2 inch mortars that contain over 2600 tons of mustard agent (HD and HT). The Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP) Facility is currently under construction at PCD and will be used to safely dismantle the weapons, access the mustard agent inside them, and treat the agent by neutralizing, or hydrolyzing, it with water. The resulting waste, or hydrolysate, will then be subsequently treated at PCAPP in biological treatment units to eliminate the primary breakdown product of the mustard hydrolysis reaction, thiodyglycol. Thiodyglycol is a schedule 2 chemical compound that must also be destroyed with the mustard agent in accordance with the international Chemical Weapons Convention. Once treated, the hydrolysate or water waste will be sent through a crystallizer and brine reduction system on-site to separate and remove metal salts, with the treated effluent then recycled back into the mustard neutralization process.

Mustard agent hydrolysis will occur in tank reactors at PCAPP and will be closely monitored to ensure for complete destruction of the mustard agent. Recently, treatability studies were completed at Battelle Laboratories in West Jefferson, Ohio on samples of the two different types of mustard agent found in the stockpile of weapons at PCD (HD and HT). The purpose of the treatability studies was to ensure that the planned recipe and parameters for treatment of the mustard will be effective in destroying the Pueblo agent and also to obtain a detailed chemical analysis of the resulting hydrolysate. Hydrolysis of the mustard agent was completed in the same manner it will be performed at PCAPP under the treatability studies, which essentially involves mixing the mustard agent rigorously with water at a ratio of 1:8, and then subsequently bringing up the pH of the mixture with sodium hydroxide to a sustained and stable pH greater than 10. Retention of the treated mixture at the sustained and stable pH greater than 10 is necessary to completely destroy breakdown products of the mustard agent, including sulfonium ions that can still cause blistering effects and that also may readily revert back into mustard agent.

The analytical results for the hydrolysate generated during the treatability studies demonstrated that the Pueblo agent will be successfully neutralized by hydrolysis. No detectable concentrations of mustard agent (HD or HT) were identified in either of the hydrolysates, indicating that both types of mustard agent will be completely destroyed. Detailed chemical analysis of the hydrolysates resulting from the treatability studies did however show detectable concentrations of several other hazardous waste constituents. While many of these constituents were diluted to very low concentrations with the water used in the hydrolysis process, a few of the constituents remained at concentrations above toxicity characteristic levels. Further analysis of these results indicates that none of the hazardous waste constituents remaining in the hydrolysate were present at levels which would cause the waste to be considered an acute hazardous waste in accordance with 6 CCR 1007-3, Section 261.11(a)(2).

Hydrolysate is a waste derived from the treatment of mustard agent that has been chemically altered to eliminate the mustard agent contained in it. The results of the treatability study therefore support listing of this hydrolysate waste with a new K903 listing that does not retain the acute hazard code, but retains the toxicity code in accordance with 6 CCR 1007-3, Section 261.11.

Regulatory Analysis

Creation of a new non-acute hazardous waste listing (K903) for mustard agent hydrolysate will allow for greater flexibility in managing this waste at PCAPP once it is neutralized and analytically verified to be free of agent downstream of the hydrolysis reactors. In particular, the new non-acute listing for hydrolysate will allow larger volumes of any newly generated wastes that may come in contact with the hydrolysate to also be managed as non-acute hazardous waste. This flexibility is significant in that up to 55 gallons of non-acute waste may be accumulated in a satellite accumulation area before it must be removed, whereas acute hazardous waste may only be accumulated up to one quart in a satellite area before it must be removed. Triple rinsing of containers holding hydrolysate wastes will not be required under the new waste listing because they will not be considered acute. Finally, the new listing would also ensure that the correct hazard code is reflected on the manifest for the waste in the event an accident occurs during transport.

In accordance with 6 CCR 1007-3, Section 268.3(a), the dilution prohibition states that a hazardous waste cannot be diluted in any way as a substitute for adequate treatment to achieve compliance with the land disposal restriction standards. Accordingly, the basis for hydrolysate listing and the new treatment standard for it ensure that all the hazardous waste constituents originally present in the mustard will be properly treated prior to land disposal. Mustard hydrolysate is not a newly generated waste, but rather a mustard agent waste that has been chemically altered to destroy the agent. While effective in destroying the mustard agent, the hydrolysis process is not effective at treating all the underlying hazardous waste constituents that were originally present in the waste mustard. Since UHCs in the mustard largely become diluted in the hydrolysate, retention of the hydrolysate as a hazardous waste subject to treatment requirements for any UHCs contained in it will ensure the dilution prohibition for this waste is not violated.

Impact of Proposed Listing and Treatment Standard

A new non-acute mustard hydrolysate listing will allow for more regulatory flexibility in managing this waste which no longer contains mustard agent. Currently, the only facility in Colorado known to possess large quantities of mustard agent is PCD and the only facility that may generate large quantities of mustard hydrolysate is PCAPP. Site-wide clean-up of the Rocky Mountain Arsenal is near complete and future management of any mustard agent or hydrolysate at RMA is not expected. PCD is owned and operated by the United States Army, which also is an owner of PCAPP with the Department of Defense. Small quantities of mustard agent may be discovered at other former military training facilities in the future, but it is not likely that large quantities of agent will be found. In the event mustard agent is neutralized during such a discovery, and mustard hydrolysate is generated in accordance with the new hydrolysate listing, these other military facilities may utilize the flexibility created by the new hydrolysate listing. Finally, in the event the mustard agent hydrolysate cannot be successfully treated at PCAPP, the waste may be shipped off-site to another permitted hazardous waste treatment, storage or disposal facility that may also manage the waste in accordance with the new hydrolysate listing.

Commission Finding

The Commission has evaluated the information presented at the rulemaking hearing, as well as the information in the Statement of Basis and Purpose. The Commission finds that this rule is necessary to protect the public health and the environment of the state.

Statement of Basis and Purpose – Rulemaking Hearing of February 19, 2013

8.81 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 264 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of § 264.550(b) Applicability of Corrective Action Management Unit (CAMU) Regulations.

These amendments modify paragraph (b) of Section 264.550 to specify that corrective action management units (CAMUs) that were approved prior to the April 22, 2002 effective date of the federal regulations, or for which substantially complete applications (or equivalents) were submitted to the Environmental Protection Agency (EPA) on or before November 20, 2000, are subject to the requirements in Section 264.551 for grandfathered CAMUs. New CAMUs and applications that did not qualify for the "grandfathered" status, are subject to the CAMU requirements of § 264.552.

The Subpart S provisions of Part 264 apply to the management of remediation wastes in corrective action management units (CAMUs) or temporary units during corrective action activities conducted at a RCRA hazardous waste management facility. The proposed amendment to paragraph (b) of § 264.550 clarifies the specific effective dates that a CAMU needed to meet in order to qualify for "grandfathered" status in accordance with § 264.551. New CAMUs and applications that did not qualify for the "grandfathered" status, are subject to the CAM U requirements of § 264.552.

These amendments to § 264.550 are being proposed in response to comments received by the Division from the EPA regarding authorization of amendments to Colorado's authorized hazardous waste program. Colorado currently has authorization from EPA for corrective action, but is not authorized for the CAMU regulations. Because Colorado's corrective action and land disposal restrictions are more stringent than the federal CAMU regulations, Colorado is not required to seek authorization for the CAMU amendments. However, because CAMUs are an integral part of corrective action, Colorado has already adopted state analogs to the federal provisions. The Division is hereby proposing these amendments to § 264.550 to address EPA's comments in order to receive authorization for the CAMU provisions.

Statement of Basis and Purpose - Rulemaking Hearing of May 29, 2013

8.82 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 261, 264, 265, 268, 279 and 100 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Methods Innovation Rule and SW-846 Final Update IIIB

These amendments revise the existing regulations to adopt state analogs to the federal provisions promulgated by the Environmental Protection Agency (EPA) under the Methods Innovation Rule (MIR) and SW-846 Final Update IIIB Final Rule published in the Federal Register on June 14, 2005 [70 FR 34538-34592]. The Final Rule serves both to update and reform the testing and monitoring requirements under RCRA to provide more flexibility in method selection and use. The following describes the specific regulatory amendments proposed under the Final Rule.

Amendments to Remove Required Uses of EPA SW-846 Methods

These amendments revise existing regulations to remove the required use of "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," also known as EPA SW-846, in § § 260.22(d)(1)(i); Part 261 Appendix IX; 261.35(b)(2)(iii)(A) and (B); 264.1034(d)(1)(iii); 264.1063(d)(2); 265.1034(d)(1)(iii); 265.1063(d)(2); 265.1084(a)(3)(iii) and (b)(3)(iii); 265.1084(a)(3)(ii)(C), (b)(3)(ii)(C) and (c)(3)(i); 266.100(d)(1)(ii) and (g)(2); 266.102(b)(1); 266.106(a); 266.112(b)(1) and (b)(2)(i); Part 266 Appendix IX; 270.19(c)(1)(iii) and (iv); 270.22(a)(2)(ii)(B); 270.62(b)(2)(i)(C); 270.62(b)(2)(i)(D); and 270.66(C)(2)(i) and (ii). These amendments also revise the incorporation by reference of SW-846 methods in § 260.11 to include only those SW-846 methods that are required for method-defined parameters, as listed in the table below. Method-defined parameters remain specified in the existing regulations and require the use of prescriptive SW-846 methods that detail the specific requirements for performing testing or monitoring of hazardous waste.

SW-846 Methods to Remain in § 260.11

SW-846 Method	Chapter Location	Method Title
0010	Ten	Modified Method 5 Sampling Train.
0011	Ten	Sampling for Selected Aldehyde and Ketone Emissions from Stationary Sources.
0020	Ten	Source Assessment Sampling System (SASS).
0023A	Ten	Sampling Method for Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofuran Emissions from Stationary Sources.
0030	Ten	Volatile Organic Sampling Train.
0031	Ten	Sampling Method for Volatile Organic Compounds (SMVOC).
0040	Ten	Sampling of Principal Organic Hazardous Constituents from Combustion Sources Using Tedlar ® Bags.
0050	Ten	Isokinetic HCl/Cl2 Emission Sampling Train.
0051	Ten	Midget Impinger HCl/Cl2 Emission Sampling Train.
0060	Ten	Determination of Metals in Stack Emissions.
0061	Ten	Determination of Hexavalent Chromium Emissions from Stationary Sources.
1010A	Eight	Pensky-Martens Closed-Cup Method for Determining Ignitability.
1020B	Eight	Setaflash Closed-Cup Method for Determining Ignitability.
1110A	Eight	Corrosivity Toward Steel.
1310B	Eight	Extraction Procedure (EP) and Structural Integrity Test.
1311	Eight	Toxicity Characteristic Leaching Procedure.
1312	Six	Synthetic Precipitation Leaching Procedure.
1320	Six	Multiple Extraction Procedure.
1330A	Six.	Extraction Procedure for Oily Wastes.
9010C	Five	Total and Amenable Cyanide: Distillation.
9012B	Five	Total and Amenable Cyanide (Automated Colorimetric, with Off-line Distillation).
9040C	Eight	pH Electrometric Measurement.
9045D	Six	Soil and Waste pH.
9060A	Five	Total Organic Carbon (TOC).
9070A	Five	n-Hexane Extractable Material (HEM) for Aqueous Samples.
9071B	Five	n-Hexane Extractable Material (HEM) for Sludge, Sediment, and Solid Samples.
9095B	Six	Paint Filter Liquids Test.

These proposed amendments eliminate the requirement to use the methods found in SW-846 in conducting various hazardous waste testing and monitoring except for those situations where the method in SW-846 is the only one capable of measuring the property (i.e. it is used for a method-defined parameter). While SW-846 methods would no longer be required for many hazardous waste testing or monitoring activities under these proposed amendments, appropriate methods must still be selected and used for RCRA testing and monitoring. Appropriate methods must either be reliable and accepted as such in the scientific community or be able to generate effective data. Reliable and accepted methods may include EPA or other governmental entity published methods that have documented reliability. Methods that generate effective data, i.e. data of sufficient quality for use in a given RCRA application or project, may also be used if the quality objectives for the project are established in a systematic planning process (a data quality objective process) and documented in the development of Quality Assurance Project Plans, Waste Analysis Plans, Sampling and Analysis Plans or other appropriate systematic planning document. Sampling and analysis documentation should be sufficient to confirm that the data are effective and that the selected method is appropriate.

These amendments make it easier and more cost effective to comply with the RCRA regulations by allowing more flexibility in method selection and use. They are intended to reduce economic burden and provide greater flexibility and utility to all affected entities, by providing an increase in choices of appropriate analytical methods for RCRA applications. These amendments do not create any new regulatory requirements or require any new reports beyond those now required by the revised regulations. Regulated entities may continue to use SW-846 methods to demonstrate compliance when it is appropriate to do so, and thus experience no impact from this rulemaking.

The following specific sections and their identified affected topic or program to the Colorado Hazardous Waste Regulations are proposed for amendment at this time by removing unnecessary reference to SW-846:

Petitions to exclude waste from a particular facility

§260.22(d)(1)(i)

Wastes exclusions

§Part 261, Appendix IX

Deletion of certain waste codes following equipment cleaning

§261.35(b)(2)(iii)(A) and (B)

Air emission standards for process vents and equipment leaks

§ §264.1034(d)(1)(iii), 264.1063(d)(2), 265.1034(d)(1)(iii), and 265.1063(d)(2)

Air emission control requirements for tanks, surface impoundments, and containers

§ §265.1084(a)(3)(iii) and (b)(3)(iii), and 265.1084(a)(3)(ii)(C), (b)(3)(ii)(C) and (c)(3)(i)

Hazardous Waste burned in boilers or industrial furnaces (BIFs)

§ §264.340(e)(1)(ii), 264.340(g)(2), and 264.341(a) – State analogs to 40 CFR § § 266.100(d)(1)(ii), 266.100(g)(2) and 266.102(b)(1) respectively

Control of metal emissions at BIFs

§264.344(a) – State analog to 40 CFR § 266.106(a)

Residues from burning of wastes in BIFs

§264.347(b)(1) and (b)(2)(i) – State analogs to 40 CFR § 266.112(b)(1) and (b)(2)(i)

Methods Manual for BIF Regulation

§264.348 Appendix IX – State analog to 40 CFR Part 266, Appendix IX

Part B information and trial burn plan requirements for incinerators and BIFs

§ §100.41(b)(5)(v)(A)(3) and (4), 100.28(c)(2)(i) and (ii), and 100.28(c)(2)(i) and (ii) – State analogs to 40 CFR § § 270.19(c)(1)(iii) and (iv), 270.62(b)(2)(i)(C) and (D), and 270.66(c)(2)(i) and (ii) respectively.*

* No state analog exists for 40 CFR § 270.22(a)(2)(ii)(B) as Colorado did not adopt the low risk waste exemption for incinerators or BIFs (see § 8.51 pg. 1417)

§260.11 is amended to revise the incorporation by reference of SW-846 to only include those SW-846 methods that are required for method-defined parameters.

Amendments to Correct, Clarify or Remove Unnecessary Reference to SW-846

These proposed amendments also correct inaccurate references to SW-846 and clarify method selection flexibility. The proposed amendments make editorial corrections, clarify the specific SW-846 method and revision to be used for any method-defined parameters and remove unnecessary references to SW-846 in the regulations. The Table below provides a list of the regulations and proposed modifications to correct, clarify or remove unnecessary reference to SW-846.

Corrections, Clarifications or Removals

Regulation	Text correction, clarification, or removal
§260.21(d)--Petitions for equivalent methods.	Clarification that equivalent methods will be added to § 260.11, instead of just added to SW-846.
§260.22(d)(1)(i) -- Petitions to amend Part 261 to exclude a waste produced at a particular facility.	Removal of unnecessary reference to SW-846.
§ §261.3(a)(2)(v), 279.10(b)(1)(ii), 279.44(c), 279.53(c), and 279.63(c) -- Rebuttable presumption for used oil.	Removal of unnecessary references to SW-846.
§261.22(a)(1) -- Characteristic of corrosivity.	Addition of the suffix "C" to method number "9040."
Appendix I to Part 261 -- Representative sampling methods.	Removal of unnecessary references to SW-846.
Appendix II to Part 261 -- Method 1311 Toxicity Characteristic Leaching Procedure (TCLP).	Removal of text in Appendix II to Part 261; appendix reserved.
Appendix III to Part 261 -- Chemical analysis test methods.	Removal of text in Appendix III to Part 261; appendix reserved.
§ §264.190(a) and 265.190(a)-- Applicability.	Addition of the suffix "B" to method number "9095."
§264.314(c) and § 265.314(d)-- Special requirements for bulk and containerized liquids.	Addition of the suffix "B" to method number "9095."
§ §264.1034(f) and 265.1034(f)-- Test methods and procedures.	Clarification that direct measurement is allowed to resolve disagreements regarding concentration estimates, and removal of unnecessary references to SW-846.
Appendix IX to Part 264 -- Ground-water monitoring list.	Clarification regarding the use of other appropriate methods by removing the "Suggested Methods" and "PQLs (µg/L)" columns and removing footnotes 1, 5 and 6 and revising and renumbering the subsequent footnotes, as appropriate.
§265.1081--Definitions.	Correction to SW-846 reference in definition of "waste stabilization process."
Appendix IX to § 264.348 -- Methods manual for compliance with BIF regulations.	Corrections to reflect removal of SW-846 methods from the BIF Methods Manual on June 13, 1997 and clarification in existing guidance regarding use of other appropriate methods and SW-846.
§268.40(b) and table-- Applicability of treatment standards.	Addition of the suffix "B" to method number "1310," addition of the suffix "C" to method number "9010," and addition of the suffix "B" to method number "9012."
§268.44, table--Variance from a treatment standard.	Addition of the suffix "C" to method number "9010" and the addition of the suffix "B" to method number "9012."
§268.48, table-- Universal treatment standards.	Addition of the suffix "C" to method number "9010" and addition of the suffix "B" to method number "9012."
Appendix IX to Part 268 -- Extraction Procedure (EP) Toxicity Test Method and Structural Integrity Test (Method 1310).	Addition of the suffix "B" to method number "1310."

Amendments to Corrosive and Ignitability Characteristic Testing Requirements

In addition, these amendments clarify the specific SW-846 methods for testing the corrosive and ignitable characteristic of wastes. Amendment of § 261.22(a)(2) removes unnecessary reference to the National Association of Corrosion Engineers (NACE) Standard TM-01-69 and replaces it with direct reference to SW-846 Method 1110A. SW-846 Method 1110 is a method under the NACE TM-01-69 Standard and has always been used for testing corrosive characteristics of liquid wastes. However, because the NACE TM-01-69 Standard allowed variation in test conditions due to the fact it was designed to test the suitability of metals for a variety of uses, reference to the broader standard in § 261.22(a)(2) led to some ambiguity in its use. Direct reference to SW-846 Method 1110A, the revised and updated version of the method under these amendments, clarifies that it must be used for determining the corrosive characteristic of liquid wastes. Corrosivity is a method-defined parameter in § 260.11 under these proposed amendments. Amendment of § 261.21(a)(1) removes reference to the Miniflash Continuously Closed Cup Tester, using the test method specified in ASTM D-6450-99 as an acceptable method to determine flash point for ignitability characteristic. The Pensky-Martens Closed Cup Tester, using the test method specified in ASTM Standard D-93-79 or D-93-80, or the Setaflash Closed Cup Tester, using the test methods specified in ASTM Standard D-3278-78 are the only methods that can be used for determining flash point for ignitability characteristic. Additionally, this amendment removes unnecessary reference to the equivalent test method demonstration for determining flash point under the ignitability characteristic. § § 260.20 and 260.21 already adequately address petitions for equivalent testing or analytical methods.

SW-846 Final Update IIIB Methods

Some of these amendments, proposed by EPA under the October, 2002 SW-846 Final Update IIIB, revise and update a number of SW-846 methods. Some of the revised methods of Update IIIB are used for method-defined parameters and thus, any required uses of those methods will remain in the regulations under these amendments. Therefore § 260.11 includes the Update IIIB methods, specified by both number and revision letter suffix, that are contained in SW-846 and that must be used to comply with the regulations for method-defined parameters. A listing of the four chapters and eleven methods in Final Update IIIB are identified in the table below.

Final Update IIIB Methods and Chapters

Chapters or Method Number	**Method or Chapter Title**
Chapter Five	Miscellaneous Test Methods.
Chapter Six	Properties.
Chapter Seven	Characteristics Introduction and Regulatory Definitions.
Chapter Eight	Methods for Determining Characteristics.
1010A	(Referral to) Pensky-Martens Closed Cup Method for Determining Ignitability.
1020B	(Referral to) Setaflash Closed Cup Method for Determining Ignitability.
1110A	Corrosivity Toward Steel.
1310B	Extraction Procedure (EP) Toxicity Test Method and Structural Integrity Test.
9010C	Total and Amenable Cyanide: Distillation.
9012B	Total and Amenable Cyanide (Automated Colorimetric, with Off-line Distillation).
9040C	pH Electrometric Measurement.
9045D	Soil and Waste pH.
9060A	Total Organic Carbon.
9070A	n-Hexane Extractable Material (HEM) for Aqueous Samples.
9095B	Paint Filter Liquids Test.

Amendments to Add Analysis Method to Air Emission Standards for Process Vents

Finally, these proposed amendments allow for the use of an additional method during analysis in support of air emission standards for process vents and/or equipment leaks at hazardous waste management facilities. § § 264.1034(c)(1)(ii) and (iv) and § § 265.1034(c)(1)(ii) and (iv) are revised under the proposed amendments to also allow use of Method 25A (in addition to Method 18) to determine organic content of the air effluent through a control device on a process vent. Organic content is a method-defined parameter in § 260.11 used to measure the operational performance of a enclosed combustion control device to a process vent associated with a hazardous waste distillation, fractionation, thin-film evaporation, solvent extraction, or air or steam stripping operation.

These amendments are considered to be equivalent to or less stringent than the existing regulations, and Colorado is not required to adopt these amendments.

This Basis and Purpose incorporates by reference the applicable portions of the preamble language for the EPA regulations as published in the Federal Register at 70 FR 34538-34592, June 14, 2005.

Statement of Basis and Purpose - Rulemaking Hearing of May 29, 2013

8.82 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 268 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Revision of Land Disposal Treatment Standards for Carbamate Wastes

These amendments revise the Land Disposal Restrictions (LDR) treatment standards for hazardous wastes from the production of carbamates and carbamate commercial chemical products, and off-specification or manufacturing chemical intermediates and container residues of these materials that become hazardous wastes when they are discarded or intended to be discarded. Currently, under the LDR program, most carbamate wastes must meet numeric concentration limits before they can be land disposed. However, the lack of readily available analytical standards makes it difficult to measure whether the numeric LDR concentration limits have been met. These amendments modify the Table of Treatment Standards in § 268.40 of the Regulations to provide the use of the best demonstrated available technologies (BDAT) as an alternative standard for treating these wastes. In addition, these amendments remove carbamate Regulated Constituents from the Table of Universal Treatment Standards in § 268.48 of the Regulations.

This rulemaking applies to generators and treatment, storage and disposal facilities (TSDFs) managing EPA hazardous waste codes: K156, K157, K158, K159, K161, P127, P128, P185, P188, P189, P190, P191, P192, P194, P196, P197, P198, P199, P201, P202, P203, P204, P205, U271, U278, U279, U280, U364, U367, U372, U373, U387, U389, U394, U395, U404, U409, U410, and U411. This rulemaking also applies to generators and TSDFs of ignitable, corrosive, reactive and toxic hazardous wastes that are reasonably expected to contain one or more of the carbamate constituents listed above as underlying hazardous constituents at the point of the waste's generation.

This Basis and Purpose incorporates by reference the applicable portions of the preamble language for the EPA regulations as published in the Federal Register at 76 FR 34147-34157, June 13, 2011. These amendments are considered to be neither more nor less stringent than the current regulations, and Colorado is not required to modify its regulations to adopt these amendments.

Statement of Basis and Purpose - Rulemaking Hearing of May 29, 2013

8.82 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 261 and 268 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Removal of Saccharin and its Salts from the Lists of Hazardous Constituents

These amendments remove saccharin and its salts from the lists of hazardous constituents (Part 261, Appendix VIII) and commercial chemical products which are hazardous wastes (§ 261.33 (f)) when discarded or intended to be discarded. Specifically, the wastes affected by this final rule are unused commercial chemical products, manufacturing chemical intermediates, off-specification material, container residues, and spill residues that contain saccharin or its salts in a pure or technical grade form, or as the sole active ingredient and are listed as EPA Hazardous Waste No. U202 (§261.33(f)). With these amendments, these wastes will no longer be subject to the U202 listing.

This rulemaking adopts state analogs to the federal rule issued by the Environmental Protection Agency (EPA) on December 17, 2010 [75 FR 78918-78926] in response to a petition submitted to EPA by the Calorie Control Council (CCC) to remove saccharin and its salts from EPA's lists of hazardous constituents, hazardous wastes, and hazardous substances.

EPA’s December 17, 2010 final rule granted CCC's petition based on a review of the evaluations conducted by key public health agencies concerning the carcinogenic and other potential toxicological effects of saccharin and its salts, as well as EPA's own assessment of the waste generation and management information for saccharin and its salts. This review/assessment demonstrated that saccharin and its salts did not meet the criteria in the hazardous waste regulations for remaining on EPA's lists of hazardous constituents, hazardous wastes, and hazardous substances.

This Basis and Purpose incorporates by reference the applicable portions of the preamble language for the EPA regulations as published in the Federal Register at 75 FR 78918-78926, December 17, 2010. These amendments are considered to be less stringent than the current regulations, and Colorado is not required to modify its regulations to adopt these amendments.

Statement of Basis and Purpose - Rulemaking Hearing of May 29, 2013

8.82 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 6 is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-314(1), C.R.S.

Amendment of § 6.04 Annual Commission Fee

Section 6.04 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) is being amended at this time by revising paragraph (a) to reflect the annual Commission fee to be assessed for fiscal year 2013-2014.

Statement of Basis and Purpose - Rulemaking Hearing of May 20, 2014

8.83 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 262 and Part 100 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in §§ 25-15-302(2) and (3.5), C.R.S.

Amendments to Hazardous Waste Fees

With one exception explained near the end of this Statement of Basis and Purpose, this proposed rulemaking simply removes the temporary decreases for hazardous waste fees that have been included in the regulations for the past 3 and one-half years. When the fees were decreased, the original fee amounts were left in the regulations, but parenthetical statements were added that modified the fees downward for some defined period of time. The changes proposed herein simply remove the parenthetical statements, leaving behind the original 2009 fee amounts as the fee amounts that will be charged beginning on July 1, 2014, the effective date of the rulechange.

The Solid and Hazardous Waste Commission (the Commission) promulgated the current hazardous waste fees in 2009. Based on cost and revenue projections at that time, the 2009 fees were intended to be adequate to fund the Hazardous Waste Program within CDPHE for about two years. However, after two years, because of higher-than-expected revenue and lower-than-expected costs, the Department determined that a one-year temporary decrease of 12% in hazardous waste fees was necessary to bring the Hazardous Waste Cash Fund balance back in line with allowable limits for cash fund carry-over.[1] The Commission agreed and reduced the hazardous waste fees by 12% for Calendar Year 2011. As it turned out, the 12% fee reduction did not reduce the cash fund balance quickly enough so a year later, the Department determined that increasing the fee reduction to 30% for one additional year was necessary. Based on revenues, costs, and the fund balance at that time, the Department suspected that the 30% fee reduction could possibly be extended into a second year. However, due to an uncertain economy, the Department asked for, and the Commission implemented, a 30% fee reduction only for Calendar Year 2012. A year later, additional analysis confirmed that this fee decrease could be extended and the Commission continued the fee reduction for another year, Calendar Year 2013.

[1] § 24-75-402, C.R.S., requires that the fiscal-year end balance in this type of account not exceed 16.5% of the previous year's expenditures

As 2013 ended, the Department again evaluated cost, revenue, and fund balance trends. By this time, the 30% fee decrease had caused a significant decrease in the cash fund balance as was intended. However, it was also apparent that, by mid-2014, revenues would need to be increased to ensure that the fund balance did not fall too far too fast. This rulemaking proposal to discontinue the fee decrease allows the fund balance to achieve allowable levels within about two years and avoids more significant fee increases in the short term future that would result from the fund balance decreasing too quickly. Based on the current projections, discontinuing the 30% fee reduction and restoring the fee amounts to the 2009 levels, as proposed in this rulemaking, should provide sufficient revenue to pay Hazardous Waste Program costs through July 1, 2017, and maybe longer. Fee amounts that were originally projected to be adequate for only two years back in 2009 will have remained in place for eight years - and were decreased for about half of that time.

Historical Background

It is useful to understand what caused the Department's 2009 cost and revenue predictions to be so far off, causing the subsequent need for a multi-year fee decrease. The "Great Recession" began in 2008, just before the Department began evaluating the need for a fee increase, and caused several unanticipated effects. The Department benefitted from higher-than-anticipated revenue, particularly in 2010, and lower-than-expected costs. Revenues were higher because:

1) Greater-than-expected volumes of hazardous waste were processed by Colorado's permitted Treatment, Storage, and Disposal (TSD) facilities. The spike in disposal volumes at TSDs was driven in part by the federal government's economic stimulus package which allowed EPA to fund large cleanups and removal projects around the nation.

2) The Program began collecting a sizable hazardous waste volume fee for a new waste stream at one of the permitted TSDs.

3) Other fee components (number of billable hours and number of hazardous waste generators) remained stronger than anticipated. The Department expected that the economic recession would cause some generators to close, decrease their operations, or decrease their generation of waste. In addition, the Department expected that the projects for which Program staff was billing hourly fees would be cut back by industry. In fact, these expected decreases did not occur.

Conversely, the Hazardous Waste Program had lower expenses because:

1) Salaries did not increase in FY10 - FY13.

2) Salaries were actually cut 2.5% in FY11 and FY12 by legislative action diverting more salary to PERA (the retirement program for state employees) and decreasing the amount paid to PERA by the state the same amount.

3) The Hazardous Waste Program did not spend the budgeted $200,000 that had been built into the 2009 fee increase for building a new data management system. That system is still planned and is budgeted for FY14 and FY15.

4) The Hazardous Waste Program did not have to pay attorney costs out of the cash account in FY11 – FY13. These costs were paid by the Department via indirect budgets.

5) The Hazardous Waste Program lost ~4 FTE in FY11 due to some minor reorganization and movement of time and effort over to the Solid Waste Program.

Technical Background

§ 25-15-301.5, C.R.S., provides general directives for implementation of the hazardous waste regulatory program. These directives include several themes including maintaining program authorization from the U.S. EPA; implementing a program that is credible and accountable to industry and the public; implementing a program that is innovative and cost-effective; and implementing a program that sets a preference for compliance assistance. § 25-15-302(2), C.R.S., provides guidance for future fee adjustments by the Solid and Hazardous Waste Commission. This guidance includes setting the fees such that the revenue generated by each fee approximates the actual reasonable program costs attributable to the facilities paying the fee. Each of these directives and guides is more fully explained in the following paragraphs.

Maintaining EPA authorization for the Hazardous Waste Program: The Department is authorized by the U.S. EPA to operate the hazardous waste regulatory program in Colorado in lieu of the federal government. One of the key criteria evaluated by the U.S. EPA in authorizing the state program is having adequate resources, both in terms of funding and in terms of qualified personnel. While EPA has complimented us on program implementation emphasizing the excellence of our staff, they watch our revenues and our fee adjustments carefully. They are aware that this fee increase is necessary to maintain adequate resources.

Implementing a program that is credible and accountable to industry and the public: The program endeavors to maintain credibility and accountability through a high-volume, high-efficiency inspection program that maintains a high level of compliance in the regulated community and preserves a level and fair playing field for all regulated entities. In addition, the program maintains a high-efficiency corrective action program that meets or exceeds its commitments to the regulated community. Since 2000, we have provided annual reports on program performance to the legislature that present the efficiency and effectiveness of our program implementation.

Implementing a program that is innovative and cost-effective: In the Hazardous Waste Compliance Assurance Unit, the number of inspections each inspector is expected to perform is included in each inspector's performance plan. In addition, timeliness limits for the administrative duties associated with each inspection are also set in the performance plans. These expectations have been modified upwards several times over the years as inspector experience and efficiency improved. Another huge success for Compliance Assurance has been the self-certification programs. These programs have drastically improved compliance in targeted sectors without adding any staff. These programs are being copied in other areas of CDPHE and in other states.

The program has set up numerous performance limits in the Hazardous Waste Corrective Action Unit which program staff routinely meet. In addition, the Unit has developed generic soil cleanup standards for the more common contaminants and exposure scenarios, thereby relieving parties performing cleanups the expense of having to hire a risk assessor to perform this work. We have updated these tables several times. In 2013, the Unit finalized the "Conditional Closure of Low Threat Sites with Residual Ground Water Contamination Policy and Guidance." This policy has been under development for several years and represents a huge conceptual step forward in how cleanup projects can be finished in an economic and safe manner.

Implementing a program that sets a preference for compliance assistance: Section 25-15-301.5(2)(g), C.R.S., requires that the Program expend at least 10 percent of the annual budget on compliance assistance efforts. In FY 2013, as it has every year, the Program met that requirement as 17.0 percent of staff time was devoted to compliance assistance.

The program has developed and continues to invest in a broad range of compliance assistance services to assist the regulated community in managing hazardous waste. These compliance assistance services include the following activities:

- A part-time customer assistance and technical assistance phone line (303-692-3320);
- A wide range of hazardous waste guidance documents and compliance bulletins;
- An extensive, useful and informative Website - www.colorado.gov/cdphe/hm;
- Compliance assistance site visits through the Generator Assistance Program (GAP);
- Hazardous waste management training to industry provided quarterly by our staff; and
- Hazardous waste training periodically requested by industry groups and others.

During FY 2013, the program provided 26 compliance-assistance training sessions to industry around the state. These trainings were attended by 1,817 people. The training sessions covered a variety of topics, and focused on hazardous waste and other related environmental regulations. In addition, program inspectors routinely incorporate compliance assistance and pollution prevention into the approximately 350 compliance inspections performed each year. Inspectors provide guidance documents to facilities during inspections as well as person-to-person advice and consultation. In FY 2013, the program conducted 63 Generator Assistance Program (GAP) site visits that had compliance assistance as the single major focus.

Setting fees where each fee approximates the actual program costs attributable to the fee-paying entities: The 2009 fee increase was calculated carefully to collect proportional amounts of revenue from each hazardous waste sector equivalent to the amount of time and effort the Department spent regulating that sector. To achieve equity between fee-paying sectors, the 2009 fee increase was not equivalent across the board. Some fees were increased more than others so that each fee approximated the actual program costs attributable to that sector. That proportion between sectors is still largely correct. Therefore, the fairest and simplest approach for this fee increase is simply restoring the 2009 fee levels, with one notable exception, explained below.

Stakeholder Process

As this proposed fee increase simply restores fee levels to those set in 2009, the Department only conducted limited stakeholder outreach. This outreach included a key group of stakeholders that had been involved in the 2009 fee increase as well as all of the regulated entities that pay large fee amounts. Only one stakeholder responded. This stakeholder is a large hazardous waste disposal facility that would like to mitigate effects on their market competitiveness by raising the fees back to 2009 levels in steps over time rather than in a single event. The Department is proposing to address this concern through a non-regulatory two-step increase back to the 2009 levels over the next 18 months. This two-step increase will only apply to those facilities in this regulated class. All other fees will be raised the full amount effective July 1, 2014.

Specifically, the Department proposes to remove the parenthetical fee decreases in the regulations for the TSD annual fees[2], exactly like the other fee categories. However, instead of charging the TSD facilities the higher amounts beginning on July 1, 2014, we are proposing to assess fees at the current reduced levels through December 31, 2014; assess fee amounts two-thirds of the way back to the 2009 levels between January 1 and December 31, 2015, and then raise the fees back to the full 2009 levels on January 1, 2016.

[2] Those fee amounts presented on the “Annual Fee Schedule” in 6 CCR 1007-3, §100.31.

This phase-in of the 2009 fee amounts for the TSDs is justified because our level of effort at the TSD facilities has slightly decreased in the intervening years relative to the other fee-paying sectors. The lower fee revenues that result from this phase-in of the 2009 fees achieves equity between fee-paying sectors, as required by statute (C.R.S. §25-15-302(b)(I) and (II)).

Statement of Basis and Purpose Rulemaking Hearing of May 20, 2014

8.83 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 266 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in §§ 25-15-302(2), C.R.S.

Amendment of 6 CCR 1007-3, Part 266 Financial Requirements

The purpose of Part 266 of these regulations is to 1) provide assurance that funds will be available to the Department when needed for adequate closure and/or post-closure care of hazardous waste management facilities should the owner and/or operator become financially non-viable and 2) provide liability coverage for the compensation of third parties for bodily injury or property damage caused by accidents or improper hazardous waste management techniques. These regulations require the owners and/or operators to estimate the costs of closure and/or post-closure care of hazardous waste management facilities and assure financial responsibility for those costs through any of four mechanisms: trust fund, letter of credit, surety bond, and insurance.

These regulations also assure that funds will be available to third parties injured by accidents or improper hazardous waste management techniques at a facility, or who have experienced property damage at or caused by the facility.

A number of changes have been made in Part 266 that are more restrictive than the Federal regulations.

These changes to Part 266 are a result of, and respond to, concerns of the Department after many years of program implementation and vulnerabilities in the existing regulations that have been exposed by a) research done by EPA's Environmental Financial Advisory Board ("EFAB") and b) effects of the recent economic recession. The proposed regulatory changes were developed utilizing a series of three stakeholder meetings at which comments were received from interested parties, discussed, and incorporated as appropriate. The Department believes that all stakeholder concerns have been resolved.

Discussion of the Regulatory Proposal

Most of the changes proposed in this rulemaking to Part 266 fall into the two main categories discussed below:

1. Elimination of the Financial Test and Corporate Guarantee

2. Strengthening the requirements for Insurance and Captive Insurance Companies

The remainder of the changes are small clarifications.

1. Elimination of the Financial Test and Corporate Guarantee

At the present time, **no** owners or operators of hazardous waste facilities in Colorado are using the Financial Test or the Corporate Guarantee.

The Financial Test and Corporate Guarantee mechanisms rely on the continuing ability of the regulated entity to pay closure and/or post-closure costs. That is to say, the owner/operator ("o/o") of a hazardous waste facility may demonstrate its ability to pay for the cost of closure and/or post-closure care by presenting information about its own financial health. When the o/o meets certain requirements, it is not required to arrange with a third-party to guarantee payment of closure and/or post-closure costs, nor is it required to set aside funds. Under this mechanism, when closure and/or post-closure costs need to be paid, the o/o continues to be solely responsible for paying them.

These amendments to § 266.14(i) and § 266.16(f) and (g) remove the Financial Test and Corporate Guarantee from the allowable mechanisms in the regulations because this mechanism presents an overall risk that is unacceptable considering the following:

- Most companies with closure and/or post-closure liabilities are not hazardous waste management companies, but are involved in some other manufacturing or processing endeavor. As such, Department staff does not necessarily have current information about the financial health of that industry, let alone that particular company.

- The responsibilities of Department staff involve protection of public health and the environment. Normally, this does not include financial regulation and oversight.

- As demonstrated by the ASARCO facilities, which used the Financial Test at one time, the financial viability of companies can change very rapidly. The ASARCO facility in Denver has one old surface impoundment in post-closure that was covered by the Financial Test. When ASARCO unexpectedly declared bankruptcy, the Financial Test would no longer assure their post-closure costs. As a result of the bankruptcy, ASARCO was unable obtain a different financial assurance mechanism, and the only way cleanup was obtained was through a purchase and absorption of all ASARCO assets and liabilities by Grupo Mexico. However, financial assurance has never been established for the ASARCO facility since the bankruptcy.

- The EFAB, in their January 11, 2006 report, observes that "very little information [is available] concerning the utilization of the Financial Test by small entities, and particularly those without a bond rating. If the small company is private, it is not subject to the same financial disclosure requirements imposed on public companies."[1] While some of the companies required to have financial assurance in Colorado are large publicly-traded corporations, this is not true of them all. For instance, International Risk Group, LLC ("IRG") is a privately held company that specializes in the remediation of environmentally impaired land and property. IRG's affiliate, Lowry Assumptions, LLC, has an agreement with the Department and the US Air Force for the remediation of the Former Lowry Air Force Base, and as such must provide financial assurance. Lowry Assumptions, LLC, currently makes use of other approved financial assurance mechanisms. Had IRG wanted to use the Financial Test or Corporate Guarantee, the Department may not have been able to verify IRGs ability to fund its closure and post-closure responsibilities.[2]

[1] U.S. Environmental Protection Agency Environmental Financial Advisory Board, January 11, 2006 report: *EFAB initial findings concerning use of the financial test and corporate guarantee to meet financial assurance requirements under RCRA programs.*

[2] IRG is in complete compliance with all of its current financial assurance requirements. It is only being used in this Statement of Basis and Purpose as an example of a small privately-held company that has financial assurance responsibilities.

It should be noted that the EFAB, making recommendations at the national level, did not have sufficient concerns as to recommend to EPA that the Financial Test and Corporate Guarantee be removed as a financial assurance mechanism. Part of the EFAB's reasoning included a cost burden to industry in transferring to another mechanism. This is not the case in Colorado, as we currently have no facilities using the Financial Test or Corporate Guarantee. The EFAB did, however, recommend tightening the requirements for the Financial Test and Corporate Guarantee.

2. Strengthening the Requirements for Insurance and Captive Insurance Companies

A. Requirements for Insurers.

These amendments to § 266.14(h) and § 266.16(h) strengthen the requirements for Insurance Companies to include qualifications for the Insurer. The Insurer must, at a minimum: 1) be licensed to transact the business of insurance in the State of Colorado, 2) attain a rating of A- or better from A.M. Best, 3) be eligible to provide insurance as an excess or surplus lines insurer of more than $100 million in one or more States, and 4) submit a copy of the proposed insurance policy to the Department for review before it is in full force and effect.

The Department has chosen to utilize an A.M. Best rating to assure that the Insurer has the financial strength to secure their liabilities. A.M. Best is a third party rating agency that evaluates all insurers and is the top rated third-party agency to provide their type of analysis and research. A rating of A- means that the Insurer has a very good financial prognosis and is not at risk of becoming financially insolvent. An Insurer will also have to demonstrate that they have at least $100 million or greater in capital and surplus beyond the liability of their outstanding policies. This will ensure that the liability covered by the policy will be guaranteed even if other outstanding policies are paid in full. The Department is also requiring an owner and/or operator to submit the insurance policy to the Department before it is approved for financial assurance. This will ensure that the policy coverage adequately meets the required needs of the closure, post-closure and/or corrective action at the facility before the policy is bound.

B. Requirements for Captive Insurance Companies.

These amendments to § 266.14(h) also strengthen the requirements for captive insurance providers. A captive insurance company is a closely-held company owned by one or more organizations or parents whose original purpose was, and may continue to be, to insure some or all of the risks of shareholders or affiliated organizations. It is used in areas other than environmental protection where parent firms find it to their advantage to set up a captive insurance company to cover well-understood risks at a lower cost than purchasing insurance policies available from commercial carriers. As a result, the financial health of the captive insurance company is closely tied with the parent company, so if the parent company encounters financial difficulties there is no guarantee that the captive insurance company would retain the necessary resources to fund any closure and/or post-closure liabilities they may have.

The Department has had concerns about captive insurance for some time. These concerns include the following:

1. A lack of independence, and thus the transfer of risk, between the captive subsidiary and the insured parent company.

2. A lack of consistent requirements for captives with regard to minimum capitalization thresholds, reserves, and encumbrances on reserves.

3. Captive insurance being domiciled in states/nations where the regulatory oversight is antiquated or favors the industry rather than protecting the general public.

4. Similar to the concern about the Financial Test and Corporate Guarantee, a general lack of Department expertise in monitoring and reviewing the financial state of captive insurance providers and their parent companies.

5. Also similar to the concern about the Financial Test and Corporate Guarantee, the financial viability of companies (and their captive insurance providers) can change very rapidly.

These concerns have been adequately addressed by adding the same requirements that were added for all insurers, as explained above. In addition, requirements have been added that the captive insurer be domiciled in the State of Vermont and that the captive insurer gives the Department at least 180 days notice before defunding a captive insurance policy. The Department is proposing that all captive insurance companies be domiciled in Vermont because Vermont regulates more captive insurance entities than any other state and has developed regulations that keep pace with, and effectively control, the captive insurance industry. The Department has also required that if the captive insurance company fails to pass the annual examination conducted by the Department of Financial Regulation of Vermont, the o/o shall submit notification to the Department, at which point a different approved mechanism would need to be secured. The 180-day notice allows the Department to work with the company to put another approved financial assurance mechanism in place before the captive insurance policy lapses.

The EFAB also evaluated captive insurance in March 2007.[3] In that evaluation, the EFAB recognized that an A.M. Best Rating and the Department of Financial Regulation of Vermont's standards and expertise as the best available.

[3] U.S. Environmental Protection Agency Environmental Financial Advisory Board, March 20, 2007 report: *EFAB Report on the Use of Captive Insurance as Financial Assurance Tool in the EPA Office of Solid Waste and Emergency Response (OSWER) Programs.* OSWER Programs include the hazardous waste program.

Statement of Basis and Purpose Rulemaking Hearing of May 20, 2014

8.83 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 6 is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-314(1), C.R.S.

Amendment of § 6.04 Annual Commission Fee

Section 6.04 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) is being amended at this time by revising paragraph (a) to reflect the annual Commission fee to be assessed for fiscal year 2014-2015.

Statement of Basis and Purpose Rulemaking Hearing of November 18, 2014

8.84 Basis and Purpose

This amendment to 6 CCR 1007-3, Part 261, Appendix IX is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of Part 261, Appendix IX to Conditionally Delist F006 Hazardous Waste Generated by Depuy Synthes located at 1051 Synthes Avenue in Monument, Colorado 80132.

Appendix IX of Part 261 is being amended to conditionally delist F006 hazardous waste generated at Depuy Synthes in Monument, Colorado. This delisting will allow Depuy Synthes to dispose of this waste at a solid waste landfill meeting the requirements of the Colorado Solid Waste Regulations (6 CCR 1007-2) or a metals recycling facility provided it complies with the conditions of the delisting. The Solid and Hazardous Waste Commission (the “Commission”) is requiring an annual verification sampling of the delisted waste and the results of that verification sampling must be submitted to the Division within sixty (60) days of the sampling event for review against initial delisting criteria and sampling methodology.

Depuy Synthes operates a manufacturing facility in Monument, Colorado for the production of surgical quality screws, plates and nails for medical use. After manufacturing, a finish is applied to the metal parts in one or more metal finishing operations including electro-polishing (chemical etching), anodizing, or chemical conversion coating (passivation). Rinse water from these metal finishing operations is treated on-site in a wastewater treatment unit to remove heavy metals prior to discharging the treated wastewater to the publicly owned treatment works (POTW). The process of treating the wastewater generates wastewater treatment sludge. Pursuant to the listing description at § 261.31, wastewater treatment sludge generated from electroplating operations is classified as F006 hazardous waste.

The basis for the F006 hazardous waste listing is described in Appendix VII of Part 261 of the hazardous waste regulations. Each listing is based on hazardous constituents that are typically contained in the waste described by the listing. The hazardous constituents that formed the basis for the F006 listing include cadmium, hexavalent chromium (Chromium VI), nickel and complexed cyanide.

Samples of the wastewater treatment sludge generated at Depuy Synthes were collected and submitted for analysis prior to submittal of the delisting petition. Four discrete samples of the wastewater treatment sludge were collected in accordance with a sampling and analysis plan that was reviewed and approved by the Hazardous Materials and Waste Management Division at the Colorado Department of Public Health and Environment.

Analytical results of the wastewater treatment sludge indicate that the sludge does not exhibit any of the hazardous waste characteristics. Sample results confirmed that the sludge does not contain organic toxicity characteristic constituents above detection levels. In addition, the sludge does not exhibit the toxicity characteristic for the eight heavy metals. The waste also does not exhibit the hazardous waste characteristic of corrosivity, ignitability or reactivity.

Copper and nickel were also analyzed using the toxicity characteristic leaching procedure (TCLP). The results of that analysis indicate that these two constituents were present in the leachate well below the EPA Residential Soil Screening Levels.

Analytical results of the wastewater treatment sludge indicate that the petitioned sludge contains hazardous constituents that are a basis for listing a waste as a F006 hazardous waste. These constituents include nickel, chromium VI and cyanide. Based on the chemical analysis of the waste samples, the average total concentration for these constituents is as follows: 2,197 parts per million (ppm) nickel, 0.005 ppm cyanide and 0.035 ppm chromium VI. With the exception of nickel, these average total constituent constituents are below the EPA Residential and Industrial Soil Screening Levels. The total average concentration of nickel is below the EPA Industrial Soil Screening Level.

Other constituents detected in the waste samples include barium, copper, lead, mercury and silver. The average total concentration for these constituents is: 19.0 ppm barium, 525.5 ppm copper, 870.4 ppm lead, 0.11 ppm mercury and 1.53 ppm silver. The average total concentration for these constituents is below the EPA Residential Soil Screening Level with the exception of lead. The average total concentration for lead is 70.4 ppm above the EPA Industrial Soil Screening Level of 800 ppm. However, as a condition of this delisting, all waste will be disposed in a solid waste landfill or recycled at an appropriate metals reclamation facility.

Using the average total concentrations of the constituents in the waste, health risk calculations were determined for residential exposure to the waste. The risk calculations were determined using the EPA's Regional Screening Level Calculator, which utilizes current health based toxicity data obtained from EPA's Integrated Risk Information System (IRIS) and Health Effects Assessment Summary Tables (HEAST). The calculator was used to determine the risk associated with the waste for a residential soil exposure scenario that evaluated the carcinogenic and non-carcinogenic risk through ingestion, dermal and inhalation pathways.

A total carcinogenic risk of greater than 1×10^{-6} of one added cancer death per million exposed individually represents an unacceptable risk to human health, according to EPA risk assessment guidance. The calculated carcinogenic risk for the wastewater treatment sludge is 1.42×10^{-7}. Therefore, this waste does not pose a carcinogenic risk.

The risk assessment calculations for the non-carcinogenic risk or cumulative total hazard quotient posed by the concentrations of detected metals in the waste were calculated at a level of 1.75. This level exceeds the hazard quotient index (HI) of 1 for the residential soil exposure scenario due to the presence of nickel. However, when nickel is excluded from the calculation the HI is reduced to 0.21. As a condition of this delisting, the wastewater treatment sludge will be disposed in a solid waste landfill or at a metals recycling facility.

This delisting is being granted under conditions specifying disposal, record keeping, storage and sampling requirements for the delisted sludge. Conditional delisting of the waste also prohibits any major changes to the metal finishing operations or wastewater treatment process without prior notification, evaluation, and approval by the Division.

The Colorado Solid and Hazardous Waste Commission, after a public hearing on November 18, 2014, voted to tentatively approve the petition to delist F006 hazardous waste generated by electroplating operations (anodizing and chemical etching) at the Depuy Synthes Facility located at 1051 Synthes Avenue in Monument, Colorado 80132. The Commission's tentative decision is subject to public written comment until January 26, 2015. If no adverse comments are received, the tentative decision will become the final decision, and the delisting will become effective on March 2, 2015 without further notice. If the Commission receives adverse comments, the Commission will publish a timely withdrawal in the Colorado Register informing the public that the rule will not take effect.

This delisting does not apply to waste that demonstrates a "significant change" as defined in Delisting #009 in Part 261, Appendix IX—Wastes Excluded Under § 260.20 and 260.22(d), or if any of the conditions specified in Part 261, Appendix IX for this delisting are not met. Should either of these occur, the waste is and must be managed as a hazardous waste. While the Commission is approving this conditional delisting for this specific waste at this specific site, the findings and criteria associated with the approval are unique. Other petitions for delisting, even if similar in material or use, will be reviewed by the Division on a case-by-case basis.

Statement of Basis and Purpose Rulemaking Hearing of May 19, 2015

8.84 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 261 is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of § 261.21 Characteristic of ignitability.

These amendments to § 261.21 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) replace the obsolete references to the DOT regulations contained in the definitions for an ignitable compressed gas (§ 261.21(a)(3)) and an oxidizer (§ 261.21(a)(4)), with the actual language from the referenced sections of the DOT regulations that was published in Title 49 of the CFR at the time of the finalization of the RCRA regulations (1980). Because it can be difficult to obtain copies of the CFR from 1980, these amendments will make it easier for the regulated community to find and apply the definitions of ignitable compressed gas and oxidizer for the purposes of § 261.21. The implementation and enforcement of the ignitability characteristic will not change in any way. The Division is simply publishing the original definitions to ease the burden on the regulated community.

This Basis and Purpose incorporates by reference the applicable portions of the preamble language for Section 261.21 of the EPA regulations as published in the Federal Register at 71 FR 40254-40255, July 14, 2006.

Statement of Basis and Purpose Rulemaking Hearing of May 19, 2015

8.84 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 261 is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of § 261.23 Characteristic of reactivity.

This amendment revises paragraph (a)(8) of § 261.23 (Characteristic of reactivity) of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) to add a cross-reference to the U.S. Department of Transportation (DOT) regulations at 49 CFR § 173.53 (Provisions for using old classifications of explosives). The Section 173.53 regulations includes the following table that may be used to compare old and new hazard class names where the classification system in effect prior to January 1, 1991 is referenced in State or local laws, ordinance or regulations not pertaining to the transportation of hazardous materials:

Current Classification	Class name prior to Jan. 1, 1991
Division 1.1……	Class A explosives.
Division 1.2……	Class A or Class B explosives.
Division 1.3……	Class B explosives.
Division 1.4……	Class C explosives.
Division 1.5……	Blasting agents.
Division 1.6……	No applicable hazardous class.

This Basis and Purpose incorporates by reference the applicable portions of the preamble language for Section 261.23 of the EPA regulations as published in the Federal Register at 75 FR 12993, March 18, 2010.

Statement of Basis and Purpose Rulemaking Hearing of May 19, 2015

8.84 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 6 is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-314(1), C.R.S.

Amendment of § 6.04 Annual Commission Fee

Section 6.04 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) is being amended at this time by revising paragraph (a) to reflect the annual Commission fee to be assessed for fiscal year 2015-2016.

Statement of Basis and Purpose Rulemaking Hearing of February 16, 2016

8.85 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 100 is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Proposed Amendment of § 100.506(c) Hazardous Waste Public Notice Requirements

These regulatory changes expand and modernize the methods by which the Department must notify the public about certain hazardous waste permitting activities. These proposed regulatory amendments to the public notice requirements of 6 CCR 1007-3, Section 100.506(c) add the requirement for public notices of permit actions to be published to the Department's and Division's website and Facebook page.

The Division is proposing to add this requirement for public notices to be published to the Department's and Division's website and Facebook page because these forums are increasingly utilized by the public as their information source of choice. In fact, the Division is already announcing all public notice opportunities to these sites. However, we feel it is important to formalize these requirements because it clarifies for the public, in our regulations, that they can expect these sites to carry this type of information.

Statement of Basis and Purpose Rulemaking Hearing of February 16, 2016

8.85 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 7 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in Section 25-15-302(7)(b), C.R.S.

Deletion and Replacement of Existing Part 7 Regulations (Procedural Rules of the Hazardous Waste Commission) with New Part 7 Regulations (Procedural Rules of the Solid and Hazardous Waste Commission)

The fundamental purpose of these rules is to establish procedural rules by which the Solid and Hazardous Waste Commission ("Commission") shall conduct its meetings, formal rulemaking, reviews of administrative penalties and informal hearings. The rules also set forth any prehearing proceedings and procedures that the Commission may impose. The rules are intended to assure that such procedures and hearings before the Commission are fair and impartial, comply with the requirements of the Colorado Administrative Procedures Act, Sections 24-4-101, *et seq.*, C.R.S., the Colorado Hazardous Waste Act, Sections 25-15-301, *et seq.*, C.R.S. ("CHWA"), and the Solid Waste Disposal Sites and Facilities Act, Sections 30-20-101 *et seq.* ("SWDA"), and to foster substantive discussion on the issues and minimize burdensome procedures.

The original basis for these regulations was the passage of Senate Bill 116, during the 1991-1992 legislative sessions. CHWA created the Hazardous Waste Commission and authorized it to promulgate rules for the operation of the Commission and hearings and proceedings before the Commission. CHWA also authorized the Commission to be the promulgating and adopting entity for hazardous waste regulations in the state, a duty previously performed by the Colorado State Board of Health, to issue interpretive rules and to review the amounts of administrative penalties affirmed by an administrative law judge.

These rules were first amended on September 21, 1993 to correct typographical errors and inadvertent omissions. In 2006, as a result of Senate Bill 06-171, the Hazardous Waste Commission was renamed the Solid and Hazardous Waste Commission and assumed rulemaking responsibilities from the State Board of Health over solid waste. The SWDA authorized the Commission to be the promulgating and adopting entity for solid waste regulations in the state. These Part 7 rules were amended on May 17, 2011 to reflect this name change.

The 2015 amendments are intended to incorporate better prehearing processes, define potential, apparent and actual conflicts of interests required for disclosure by Commissioners, as well as clarify the informal hearing and formal rulemaking processes.

These rules are based on specific requirements set forth in Sections 25-15-301, et seq., C.R.S., and the requirements set forth in Sections 30-20-101 *et seq.*, C.R.S., and the requirements of the Administrative Procedures Act, Sections 24-4-101, *et seq.*, C.R.S.

Statement of Basis and Purpose Rulemaking Hearing of February 16, 2016

8.85 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 261 is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of § 261.5 Special requirements for hazardous waste generated by conditionally exempt small quantity generators.

This amendment corrects an inconsistency in paragraph (b) of § 261.5 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) that was created when amendments to the Part 263 Transfer Facility regulations were adopted by the Solid and Hazardous Waste Commission on May 18, 2010. As part of the Part 263 amendments, a new paragraph (b) was added to § 263.10, which specifies that transfer facilities handling only conditionally exempt small quantity generator (CESQG) waste are subject to the requirements of Subparts A (General Requirements), C (Hazardous Waste Discharges), D (Spills at Transfer Facilities) and E (Closure of a Transfer Facility). Transfer facilities handling only CESQG waste are not subject to the manifest requirements in Subpart B.

As documented in the Statement of Basis and Purpose from the May 18, 2010 Hearing (See § 8.73 of the Regulations), the Part 263 amendments were developed as part of a review of the Part 263 regulations conducted by the Hazardous Materials and Waste Management Division (the "Division"). This was done for the purpose of updating and improving the existing regulations that apply to transfer facilities in Colorado in order to ensure protection of public health and safety and the environment. Input from key stakeholders, including eight transfer facilities and representatives of the Colorado Emergency Planning Commission and the South Metro Fire Rescue Authority, was also incorporated into the development of these regulations.

The Division's review of the Part 263 regulations was initiated by a request from the Solid and Hazardous Waste Commission following a February 2009 briefing regarding a fire that occurred on October 5, 2006 at the Environmental Quality Co. (EQ) hazardous waste transfer facility in Apex, North Carolina. Mr. William Wright of the United States Chemical Safety and Hazard Investigation Board (CSB) provided a presentation on the North Carolina Apex Incident at the February 17, 2009 Commission hearing. The CSB conducted a formal investigation into the fire, and published a case study, Fire and Community Evacuation in Apex, North Carolina (2007-01-I-NC, April 16, 2008, which is available online at http://www.csb.gov/). The amendments in the May 2010 rulemaking upgraded the transfer facility requirements so as to prevent, or enable more effective response, to a similar incident in Colorado.

In general, transfer facilities are lightly regulated under the hazardous waste regulations. The May 2010 amendments required certain operational improvements at transfer facilities without creating an undue regulatory burden.

Pursuant to the current wording § 261.5(b), CESQG waste would not be subject to the Part 263 regulations. This amendment corrects this unintended omission in the regulations and provides consistency with the Part 263 requirements.

This amendment is more stringent than the federal regulations. The Commission has evaluated the information presented at the rulemaking hearing, as well as the information in the Statement of Basis and Purpose. The Commission considers this information sufficient to justify adopting the proposed rule. The Commission finds that this rule is necessary to protect public health and the environment.

Statement of Basis and Purpose Rulemaking Hearing of February 16, 2016

8.85 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260 and 261 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Definition of Solid Waste Amendments

On January 13, 2015, the Environmental Protection Agency published a final rule in the Federal Register {80 FR 1694-1814} that revised several recycling-related provisions associated with the definition of solid waste (DSW) used to determine hazardous waste regulation under Subtitle C of the Resource Conservation and Recovery Act (RCRA). The 2015 DSW rule revised the previous 2008 DSW rule to provide additional oversight and minimize potential risk of releases to surrounding communities. The rule establishes a clear, uniform legitimate recycling standard for all hazardous secondary materials recycling to improve compliance and help ensure that the hazardous secondary materials are in fact legitimately recycled, rather than illegally disposed of. Establishing standards in the regulations for legitimate recycling makes it substantially harder for facilities who are illegally disposing under the guise of recycling to continue to operate in the marketplace. The intent of these revisions is to ensure that the hazardous secondary materials recycling regulations, as implemented, encourage reclamation in a way that does not result in the increased risk to human health and the environment from discarded hazardous secondary material.

Today's amendments to Parts 260 and 261 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) adopt states analogs to the federal provisions of the January 2015 DSW rule that are considered to be more stringent than the 2008 DSW federal requirements, including: 1) the prohibition of sham recycling and the definition of legitimate recycling (including the definition of "contained"); 2) accumulation date tracking requirements for speculative accumulation provisions; and 3) changes to the standards and criteria for the solid waste variance and non-waste determinations.

The specific amendments being adopted at this time include the following:

1) Addition of definition of "Contained" in § 260.10 – As defined in § 260.10, "*Contained*" means held in a unit (including a land-based unit as defined in this subpart) that meets the following criteria:

   (i) The unit is in good condition, with no leaks or other continuing or intermittent unpermitted releases of the hazardous secondary materials to the environment, and is designed, as appropriate for the hazardous secondary materials, to prevent releases of hazardous secondary materials to the environment. Unpermitted releases are releases that are not covered by a permit (such as a permit to discharge to water or air) and may include, but are not limited to, releases through surface transport by precipitation runoff, releases to soil and groundwater, wind-blown dust, fugitive air emissions, and catastrophic unit failures;

   (ii) The unit is properly labeled or otherwise has a system (such as a log) to immediately identify the hazardous secondary materials in the unit; and

   (iii) The unit holds hazardous secondary materials that are compatible with other hazardous secondary materials placed in the unit and is compatible with the materials used to construct the unit and addresses any potential risks of fires or explosions.

   (iv) Hazardous secondary materials in units that meet the applicable requirements of Parts 264 or 265 are presumptively contained.

2) Addition of definition of "Hazardous secondary material" in § 260.10 – As defined in § 260.10, "*Hazardous secondary material*" means a secondary material (e.g., spent material, by-product, or sludge) that, when discarded, would be identified as hazardous waste under Part 261 of these regulations.

3) Amendment of § 260.31 Standards and criteria for variances from classification as a solid waste – Section 260.31(c) provides the specific standards that a partially-reclaimed material must meet in order to be eligible for a variance from classification from solid waste. The criteria for the partial reclamation variance in § 260.31(c) clarifies when the variance applies and requires, among other things, that such reclamation meet the § 260.43 legitimacy criteria.

4) Amendment of § 260.33 Procedures for variances from classification as a solid waste, for variances to be classified as a boiler, or for non-waste determinations. – Section 260.33(c) requires facilities to send a notice to the Director and potentially re-apply for a variance in the event of a change in circumstances that affects how a hazardous secondary material meets the criteria upon which a solid waste variance or non-waste determination has been based. Section 260.33(d) establishes a fixed term limit of ten years for variance and non-waste determinations, unless the petitioner re-applies to the Department to have variance or non-waste determination renewed. Section 260.33(e) requires facilities to re-notify every two years under § 260.42 with updated information.

5) Amendment of § 260.34 Standards and criteria for non-waste determinations. – The existing Section 260.34 (Standards and Criteria for Non-waste Confirmations) is being deleted in its entirety and replaced with a new Section 260.34 (Standards and criteria for non-waste determinations) to match the federal language. The criteria for non-waste determinations in § 260.34(b)(4) and § 260.34(c)(5) require that petitioners for a non-waste determination explain or demonstrate why their hazardous secondary materials cannot meet, or should not have to meet, the conditions for a solid waste exclusion under § 261.2 or § 261.4.

6) Addition of § 260.42 Notification requirement for hazardous secondary materials. – Section 260.42 specifies the requirements that a facility managing hazardous secondary materials under § 260.30 must comply with. Facilities receiving variances or non-waste determinations must send a notification of this activity prior to operating under this regulatory provision and by March 1 of each even-numbered year thereafter to the Department. Additionally, these facilities must notify within 30 days of stopping management of hazardous secondary materials under the variance or non-waste determination.

7) Addition of § 260.43 Legitimate recycling of hazardous secondary materials. – The provisions of § 260.43 are designed to distinguish between real recycling activities(i.e., legitimate recycling) and “sham” recycling, and specifies the four mandatory factors that must be met for recycling to be legitimate. The four legitimacy factors are: 1) the hazardous secondary material must provide a useful contribution to the recycling process or product; 2) the recycling process must produce a valuable product or intermediate; 3) the hazardous secondary material must be managed as a valuable commodity; and 4) the recycled product must be comparable to a legitimate product or intermediate. **Note**: As part of this amendment, the existing legitimate recycling criteria currently found at § 261.2(f) are being deleted.

8) Amendment of § 261.1(d)(8) – Pursuant to the speculative accumulation requirements at § 261.1(d)(8), all persons subject to § 261.1(d)(8) must place materials subject to those requirements in a storage unit with a label indicating the first date that the material began to be accumulated. If placing a label on the storage unit is not practicable, the accumulation period must be documented through an inventory log or other appropriate method.

9) Amendment of § 261.2 – Section 261.2 is being amended to add materials that are "sham recycled" as the fourth type of abandoned materials that are solid waste under § 261.2(b), and adding a prohibition on sham recycling at § 261.2(g). A hazardous secondary material found to be sham recycled is considered discarded and a solid waste. Sham recycling is recycling that is not legitimate recycling as defined in § 260.43 of the Regulations.

This Basis and Purpose incorporates by reference the applicable portions of the preamble language for the EPA regulations as published in the Federal Register at 80 FR 1694-1814, January 13, 2015.

Statement of Basis and Purpose Rulemaking Hearing of February 16, 2016

8.85 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 100 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

These amendments modify sections 100.10, and 100.26 of Part 100 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) to clarify that Corrective Action Plans (CAPs) are permits and can serve in place of traditional RCRA permits for corrective action and closure activities.

Corrective Action Plan (CAP) Amendments - Clarifying Corrective Action Plans are Permits

In 1999, the Commission adopted § 100.26 to the Regulations establishing the Corrective Action Plan (CAP) as an alternative to a formal RCRA permit. At that time, the Commission expressly stated its intent was to "create a streamlined permit authorizing corrective action or closure at non-permitted facilities." *Statement of Basis and Purpose for Rulemaking Hearing of April 20, 1999*, 6 CCR 1007-3 §8.38. Nonetheless, confusion evolved within the regulated community regarding whether a CAP is in fact a permit subject to Department enforcement authority pursuant to § 25-15-308, C.R.S. The following amendments clarify CAPS are Permits:

1) Addition of paragraph (e) to § 100.10 (Scope of the RCRA Permit Requirement). Section 100.10 of the regulations identifies enforceable mechanisms an operator of a facility and the Department can use to either close or conduct post-closure care for a hazardous waste management unit in lieu of a formal RCRA permit. Paragraph (e) specifies CAPS are included as an alternative to a formal RCRA permit. Pursuant to § 100.26, CAPS provide operators with a streamlined process to obtain an enforceable mechanism governing remedial activities. The CAP provisions are far less onerous compared to the process for obtaining a formal RCRA permit outlined in the remainder of Part 100.

2) Amendment of paragraph (a) of § 100.26 (Corrective Action Plan). The amendment to § 100.26 explicitly states an approved CAP serves as a permit for a facility engaging in corrective action activities. In a number of instances, facility operators were not aware of this distinction, and mistakenly perceived activities pursuant to CAPs as "voluntary" in nature. Despite this misperception, the Department consistently requires facilities to complete CAP obligations, and on multiple occasions was forced to utilize significant state resources pursuing formal enforcement actions to gain CAP compliance. The added language clarifies CAPS are formal permits and eliminates the notion that activities specified in CAPS are voluntary.

Statement of Basis and Purpose Rulemaking Hearing of May 17, 2016

8.86 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 6 is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-314(1), C.R.S.

Amendment of § 6.04 Annual Commission Fee

Section 6.04 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) is being amended at this time by revising paragraph (a) to reflect the annual Commission fee to be assessed for fiscal year 2016-2017. This rulemaking does not change the amounts of the annual Commission fees, but only changes the rules to reflect the 2016-2017 fiscal year.

Statement of Basis and Purpose Rulemaking Hearing of February 21, 2017

8.87 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 261 are made pursuant to the authority granted to the Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Introduction

The Colorado Hazardous Waste Regulations (CHWRs), 6 CCR 1007-3, Part 261, Subpart B allow chemicals or other materials that are solid wastes to be added to the hazardous waste listing if the chemical or material can be shown to meet any of the criteria listed in 6 CCR 1007-3, Section 261.11(a). Pursuant to 6 CCR 1007-3, Section 261.11(b), classes or types of solid waste may also be listed as hazardous waste if wastes within the class or type of waste are, typically or frequently hazardous under the definition of hazardous waste found in the Colorado Hazardous Waste Act. That is, a "hazardous waste" means a solid waste which may "cause or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness or poses a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed." C.R.S. § 25-15-101(6)(a).

The Division has previously requested listing of other chemical agents in the past. The Division submitted a proposal to the Hazardous Waste Commission to list Mustard Agents as acute hazardous (P listed) wastes in June, 1997. The Commission adopted these changes at the rulemaking hearing on August 19, 1997. Additionally, the Division previously requested addition of chemical weapons containing Sarin and Mustard agents and environmental media, debris, and containers contaminated through contact with these agents to the specific source hazardous wastes, K901 and K902 listed hazardous wastes respectively in June, 2001. The hazardous constituents that formed the basis for listing the K901 and K902 hazardous wastes in 6 CCR 1007-3, Part 261, Appendix VII were Sarin and both types of sulfur Mustard agents, HD and HT. The Commission adopted these changes at the rulemaking hearing on June 19, 2001.

Currently, K901 wastes are described as waste chemical weapons using or containing any chemical compound identified in Appendix VII of Part 261 as the basis for the listing. K902 hazardous wastes consist of "Any soil, water, debris or containers contaminated through contact with waste chemical weapons listed as K901. Acute hazardous wastes are subject to more stringent management requirements than wastes that are not acute, including limited waste accumulation volumes.

Until recently, it was believed that Sarin and the Mustard agents wastes were the only chemical agent wastes that existed in Colorado. However, during the last year it was discovered that Lewisite chemical agent wastes may also be buried at the Pueblo Chemical Depot. Currently, the Army is formulating plans to excavate two Solid Waste Management Units (SWMUs 12 and 13) at the Pueblo Chemical Depot. There are reports indicating that between 1944 and 1946, an unspecified number of Lewisite -containing munitions (possible maximum of 160 M70 bombs and various shells) may have been buried in at least one of these areas onsite.

When Lewisite agent is discarded as defined in 6 CCR 1007-3, Section 261.2(a)(2), the agent becomes a solid waste and meets at least one of the regulatory criteria set forth under 6 CCR 1007-3, Section 261.11(a). Accordingly, if Chemical Weapons, or Environmental Media, Debris, and Containers Contaminated through Contact with Waste Chemical Weapons containing Lewisite are discarded as defined in 6 CCR 1007-3, Section 261.2(a)(2), they pose a substantial present and potential hazard to human health or the environment if they are improperly treated, stored, transported, disposed of, or otherwise managed. For this and other reasons presented herein, Waste Lewisite Chemical Weapons, or Environmental Media, Debris, and Containers Contaminated through Contact with Lewisite should be added to the existing K901 and K902 -listed hazardous wastes.

Statement of Basis and Purpose

These amendments to the CHWRs are made pursuant to the authority granted to the Hazardous Waste Commission in C.R.S. § 25-15-302(2).

The Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division (the Division) is proposing two revisions to 6 CCR 1007-3, Parts 261. The proposed revisions provide for the following amendments to Part 261 of the CHWRs:

1) Addition of Lewisite Agent (L) (2-Chlorovinylarsine dichloride (L1), Dichlorovinylchloroarsine (L2), and 2,2',2"-Trichloro-trivinylarsine (L3)) to Appendix VIII "Hazardous Constituents"; and,

2) Addition of Lewisite Agent (L1, L2, L3) to Appendix VII – "Basis of Listing Hazardous Waste" for K901 and K902 hazardous waste listings.

Adding Lewisite to the list of hazardous constituents for the existing K901 and K902 listings will allow for a more robust ability to manage and regulate both the acute toxic Lewisite agent as well as secondary wastes contaminated through contact with the material.

Lewisite (L) is an organoarsenic compound. It was once manufactured in the U.S., Japan, and Germany for use as a chemical weapon, acting as a vesicant (blister agent) and lung irritant.

The regulatory criteria for listing a hazardous waste or listing classes or types of solid waste can be found in 6 CCR 1007-3, Section 261.11. In summary a solid waste can be listed as a hazardous waste if it meets any one of three (3) criteria: first, if the solid waste exhibits any characteristic of a hazardous waste; second if a solid waste presents or is suspected to present certain acute human health hazards; and third, if it is capable of posing a substantial present or potential hazard to human health or the environment when improperly managed. The second criterion applies to Acute Hazardous Waste, as the Division has proposed for the Lewisite Agent, Waste Chemical Weapons, and Environmental Media, Debris, and Containers Contaminated through Contact with Waste Lewisite Chemical Weapons.

Currently, the only facility in Colorado known to have material affected by this hazardous waste listing is the Pueblo Chemical Depot (PCD). This facility is owned and operated by the United States Army (the Army).

Overview of Chemical Weapons, Lewisite Agent L

In the past, international agreements such as that arising from the 1972 Biological and Toxin Weapons Convention focused on the destruction of biological and toxin weapons that were manufactured and stockpiled as a result of their production during wartime. These agreements have left nations with the formidable task of treating and disposing of these lethal weapons.

The Chemical Weapons Convention (CWC), the most recent of such agreements sought to clarify both the definition of Chemical Weapons and the prohibitions on the development, production, acquisition, stockpiling, destruction, and use of chemical weapons. Article II of the CWC defines chemical weapons in three parts. First, chemical weapons are "identified as all toxic chemicals and their precursors, except those intended for purposes allowed by the CWC," second as "munitions and devices specifically designed to release these toxic chemicals," and third as "any equipment specifically designed for use with such munitions or devices."(OPCW Fact Sheet 2, 2001).

Chemical weapons are defined in Section 260.10 of the CHWRs to clearly define the K-waste listing. The regulatory definition closely follows the definition for "chemical agent and munitions" found in 50 USC 1521(j) which is used by both the U.S. Environmental Protection Agency and the Department of Defense. In proposing this regulatory definition the Division reviewed the comprehensive definition provided by the CWC to ensure that the definition "does not unnecessarily hinder the legitimate use of chemicals and the economic and technological development to which such uses may lead" (OPCW Fact Sheet 4, 2001). The Division believes that the definition for lewisite-containing chemical weapons is consistent with that provided by the CWC.

Lewisite was developed as a chemical warfare blister agent during World War I and was named after its inventor Captain W. Lee Lewis. It is no longer produced in the United States. The general population will not be exposed to Lewisite. People that are potentially exposed to Lewisite are soldiers or people who work at military sites where Lewisite may be stored or disposed.

Pure Lewisite is a colorless, odorless oily liquid; however, synthesized agent is amber to dark brown liquid with a geranium like odor. Lewisite may exist as the *trans* or *cis* isomer. In basic solution, the *trans* isomer of Lewisite is cleaved to yield acetylene and sodium arsenite. In addition, the *cis* isomer of Lewisite may be photoconverted to the *trans* isomer, and the trivalent form of arsenic in Lewisite oxide is generally oxidized to pentavalent arsenic under environmental conditions. Lewisite is an unstable compound; thus, environmental exposures may be to a mixture of Lewisite with one or more of its degradation products and/or frequently occurring impurities. Lewisite has moderate vapor pressure, and if released into the air, it is expected to exist solely in the vapor phase. Once in the air, Lewisite is expected to degrade slowly (may persist for a few days before being broken down). Lewisite has low water solubility, but it rapidly hydrolyzes in water forming the water-soluble product 2-chlorovinyl arsonous acid (CVAA) and hydrochloric acid, but small amounts may evaporate. Lewisite will be broken down in moist soil quickly, but small amounts may evaporate. Lewisite does not accumulate in the food Chain. Lewisite is an organic arsenical with vesicant properties. Lewisite-1 (L-1) is formed by the reaction of acetylene with arsenic trichloride using aluminum trichloride as a catalyst. Arsenic trichloride, Lewisite-2 (L-2; bis(2-chlorovinyl) chloroarsine), and Lewisite-3 (L-3; tris(2-chlorovinyl) arsine) are co-products/impurities concurrently formed with L-1. L-1 yield is greater than 65%, and approximate yields of arsenic trichloride, L-2, and L-3 are 16-21%, 7-10%, and 4-12%, respectively. Therefore, an accidental release from storage tanks or disposed chemical weapons of L will likely be the release of a mixture of L-1, L-2, L-3, and arsenic trichloride. Exposure will be to these compounds and to potential hydrolysis products, sodium arsenite (NaAsO2) and arsenic acid (H3AsO4). Toxicity data on arsenic trichloride are limited; however, effects are similar to those of L-1. With regard to lethality, arsenic trichloride appears to be approximately 2-3 times less toxic than L-1.

Health Effects of Lewisite

As summarized by the National Research Council (NRC, 2013)[1], Lewisite is readily absorbed through the mucous membranes, and is also readily absorbed through the skin because of its lipophilicity. Lewisite causes local corrosive damage and may cause systemic poisoning after absorption through skin or mucous membranes. Lewisite is immediately and highly irritating at concentrations of about 6-8 mg/m^3. The geranium-like odor is reportedly detectable at 14-23 mg/m^3 (Gates et al. 1946 as cited by NRC, 2013).

Exposure to lewisite causes almost immediate irritation and burning sensation of the eyes, skin, upper respiratory tract, and lungs. Death may result from direct pulmonary damage or circulatory failure from fluid loss and arrhythmia. Death that occurs within 24 h of exposure is likely due to pulmonary damage. According to ATSDR (2014)[2], exposure to very high levels of lewisite may cause liver and kidney damage. Additionally, chronic respiratory diseases and severe damage to the eye may be present for a long time following exposure to large amounts of lewisite. Chronic exposure to lewisite may lead to arsenical poisoning.

Human exposure data are dated and many studies are not well described. No information concerning developmental or reproductive toxicity or genotoxicity with regard to Lewisite exposure in humans was identified. Information suggesting an increased cancer incidence in workers from a Japanese poison gas factory is confounded because workers were exposed to several chemicals.

Animal data are limited but suggest that lewisite is highly irritating and corrosive, causing dermal and ocular lesions by contact with liquid or vapor inhalation. There is no evidence that Lewisite is a reproductive or developmental toxicant in rats or rabbits in the absence of maternal toxicity. Genotoxicity assay results were generally negative; the only positive result was in chromosome aberrations in Chinese hamster ovary (CHO) cells. No information concerning carcinogenicity in animals was found.

Acute lethality

Inhalation

The inhalation LC50 for lewisite vapor in humans was estimated to be 120 mg/m^3 for 10 min and 50 mg/m^3 for 30 min.

In rabbits, 7.5-min LC_{50} of 160 mg/m3 and a 60-min LC_{50} of 25 mg/m^3 was reported (Gates et al. 1946 as cited by NRC, 2013). In guinea pigs, a 9-min LC_{50} of 111 mg/m^3 and a 60-min LC_{50} of 8 mg/m^3 were reported (Gates et al. 1946 as cited by NRC, 2013).

Dermal

In humans an LC_{50} of 3,300 mg/m^3 for 30 min for lewisite vapor absorption through the bare skin was estimated. This estimate is based on animal data and assumes that absorption of lewisite through skin is a function of the ratio of surface exposed to body volume. A dermal LD_{50} of more than 40 mg/kg was also estimated based on animal data (NRC 2013).

In rabbits, dermal LD_{50} of 6 mg/kg and intravenous LD_{50} of 0.5 mg/kg were reported (Cameron et al. 1946 as cited by NRC, 2013). In guinea pigs, a dermal LD_{50} of 12 mg/kg and subcutaneous LD_{50} of 1 mg/kg were also reported (Cameron et al. 1946 as cited by NRC, 2013).

Ingestion

Ingestion of Lewisite is an uncommon route for exposure but can lead to local effects and systemic absorption. Ingestion of Lewisite may cause severe stomach pain, nausea, vomiting, and bloody stools ATSDR (2014)[2] and ATSDR (2002)[3].

Regulatory Evaluation

The regulatory criteria for listing a solid waste as a hazardous waste can be found in 6 CCR 1007-3, Section 261.11. As explained previously, this proposed listing applies to Lewisite Agent, and Environmental Media, Debris, and Containers Contaminated through Contact with Waste Chemical Weapons containing Lewisite that have been determined to be solid wastes. Solid waste that has been found to be fatal to humans in low doses, or in the absence of data on human toxicity, has been shown in studies to have certain specific levels of toxicity in animals, may be listed as hazardous waste by the Division. As discussed above, Lewisite Agent, by its inherent design as a lethal chemical agent, is fatal to humans in low doses. Toxicological data and other information are readily available to establish that Lewisite is fatal to humans in low doses. Pursuant to the CHWRs, materials exhibiting these criteria will be designated as Acute Hazardous Wastes.

Chemical weapons containing Lewisite, are designed to pose similar hazards to human health and the environment, as do the pure chemical agents. These hazards are due both to the presence and demonstrated high toxicity of the chemical agents themselves. The Division is seeking the addition of Lewisite to the Waste Chemical Weapons as a general class of hazardous waste because the weapons themselves, i.e. the shell casings and other material composing the “chemical weapon”, are contaminated with the chemical agent. In addition, any Environmental Media, Debris, and Containers which are solid wastes that have been generated as a result of the treatment, storage, or disposal of Chemical Weapons, frequently or typically pose a hazard to human health because these materials can also be contaminated with the chemical agent contained in the weapon. Accordingly, Waste Chemical Weapons and Environmental Media, Debris, and Containers Contaminated through Contact with Waste Chemical Weapons “pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.” C.R.S. § 25-15-101(6)(a).

The Division believes that shell casings, munitions, devices, and other equipment used to contain, and release chemical agents as part of a Waste Chemical Weapon can be assumed to be contaminated with chemical agent as these components are often in direct contact with the chemical agent. While it may be true that some of the components of a Waste Chemical Weapon may not be in direct contact with the chemical agent itself, the Division believes that the potential for these components to become contaminated with the chemical agent as a result of the agent leaking out is a realistic concern.

The Division also believes that Environmental Media, Debris, and Containers which are solid wastes generated as a result of the treatment, storage, or disposal of Waste Chemical Weapons frequently or typically pose a hazard to human health because these materials can also be contaminated with the chemical agent contained in the weapon. In fact, the “Army generates a number of secondary waste streams, primarily from treatment of wastes to remove or destroy chemical agent, that may contain minute amounts of the agents or associated compounds.” (Army Vol. 1, pg. 40, 1999).

In order to assure that these secondary wastes are handled and disposed of appropriately, the Division is proposing the addition of Lewisite to the existing K901 and K902 listing for Waste Chemical Weapons and Environmental Media, Debris, and Containers Contaminated through Contact with Waste Chemical Weapons to the hazardous waste listings. Wastes that meet the K902 listing description would not carry the listing code for Waste Chemical Weapons (K901) which might otherwise be applied to these wastes based on the mixture and derived from rules. The Army appears to agree with this contention. For example, the Army has proposed to list the following wastes as K-hazardous wastes in Utah: spent chemical neutralization solutions used to neutralize chemical agents, miscellaneous solids such as glass, metal, and wood contaminated with chemical agents, spent laboratory or monitoring and testing materials such as rags, wipes, gloves, aprons, and ppe contaminated with chemical agent, antifreeze, hydraulic fluid and refrigerants contaminated with chemical agents, spent carbon from air filtration equipment contaminated with chemical agent, ash, cyclone residue, baghouse dust, slag and refractory contaminated with chemical agent, and brine salts, liquids, solids and sludges generated from pollution abatement systems designed for treatment of chemical agents. The Army contends that these “waste streams are all proposed to be listed because they typically or frequently contain (or at one time contained) toxic constituents B specifically one or more of the chemical agents . . .” (Army Vol. 1, pg. 69, 1999).

Based on the above regulatory evaluation, Waste Chemical Weapons and Environmental Media, Debris, and Containers Contaminated through Contact with Waste Chemical Weapons meet the necessary criteria presented in Section 261.11(b) of the CHWRs for listing as a class of hazardous waste. In addition, waste Lewisite Agent meets the necessary criteria presented in Section 261.11(a) of the CHWRs for listing as an acute hazardous waste. Therefore, the Division proposes that Waste Chemical Weapons and Environmental Media, Debris, and Containers Contaminated through Contact with Waste Chemical Weapons and Lewisite Agent be added to the K-listed wastes found in Sections 261.32 and 261.33 of the CHWRs respectively. The Division specifically proposes to add Lewisite to the waste codes K901 for Waste Chemical Weapons, K902 for Environmental Media, Debris, and Containers Contaminated through Contact with Waste Chemical Weapons.

Lewisite Agent is also proposed for addition into Appendices VII and VIII of Part 261 of the CHWRs to identify the specific chemicals which form the basis for the K-listings. As previously stated, Mustard Agents are already P-listed hazardous wastes in the CHWRs. Addition of Lewisite to Appendix VII identifies the specific chemical agents that pose the acute health hazard (basis for listing) in the proposed listings.

<u>Benefits of Listing Lewisite as a hazardous constituent forming the basis for the K901 Waste Chemical Weapons, and K902 Environmental Media, Debris, and Containers Contaminated through Contact with Waste Chemical Weapons as Hazardous Waste</u>

The principal benefits of listing Lewisite as hazardous wastes include the following:

1) The State will have an increased regulatory framework for management of waste Lewisite Agent, Waste Chemical Weapons containing Lewisite, and any Environmental Media, Debris, and Containers Contaminated through Contact with Waste Chemical Weapons which contain concentrations of the chemical agents. Approving the proposed listing will require more complete and appropriate treatment, as well as adequate record keeping and management of current and future inventories of these waste streams under the CHWRs.

The Division believes this proposed listing is appropriate given the extreme toxicity of Lewisite agent and the potential for solid waste generated during management of chemical weapons to be contaminated with chemical agents. The Department will have additional accountability from the Army thereby ensuring protection of human health and the environment during management of waste Lewisite Agent, Waste Chemical Weapons, or Environmental Media, Debris, and Containers Contaminated through Contact with Lewisite-containing Waste Chemical Weapons. Management of these wastes will include the time during interim management (the time between recovery and treatment) of the wastes, during treatment and destruction of the wastes, and throughout disposal of the wastes.

2) There will be an increase in the regulatory guidelines and enforcement accountability for the treatment and management of associated waste streams including munitions parts, personnel protective equipment (PPE), dunnage, etc. If the proposed listing is approved, Lewisite-containing wastes would carry the listings until they are either delisted, fully treated or decontaminated, or properly disposed of. These associated waste streams, resulting from the demilitarization process, may be large in volume, and could potentially have significant impacts on human health and the environment if improperly managed.

3) Under the proposed listings, any spills (to soil or otherwise) or other impacts to environmental media would require cleanup and disposition as listed wastes under the “mixture rule.” The mixture rule provides that material mixed with a listed hazardous waste become a hazardous waste. This provision helps ensure that waste quantities are minimized, and ensures the protection of public health and the environment through proper management of these contaminated wastes.

4) This listing will require the Army to consider waste management planning as a factor in the Chemical Demilitarization Process which will be chosen for any Lewisite agent rounds recovered and stored at the Pueblo Chemical Depot. All listed waste streams must be managed adequately to protect public health and the environment. In addition, the planning process may result in the minimization of waste generation in the excavation and cleanup of burial areas.

The anticipated costs to the Army related to the impact of these proposed listings are minimal when compared to the overall cost of treatment and destruction of chemical agents and the decommissioning and disposal of any recovered chemical weapons. Many of the costs to manage these wastes streams are already required to ensure worker safety.

[1] NRC (2013). Acute exposure guideline levels for selected airborne chemicals: Volume 15. Washington (DC): National Academies Press (US).

[2] ATSDR (2014). Medical Management Guidelines for Blister Agents: Lewisite (L)(C2H2AsCl3) and Mustard-Lewisite Mixture (HL). Available at: https://www.atsdr.cdc.gov/mmg/mmg.asp?id=922&tid=190

[3] ATSDR (2002). FAQs on Blister agents: Lewisite and Mustard-Lewisite Mixture. Available at: https://www.atsdr.cdc.gov/toxfaqs/tfacts163.pdf

Statement of Basis and Purpose Rulemaking Hearing of February 21, 2017

8.87 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 261 and 267 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of § 261.6(a)(2) and § 267.20(b) Regarding Requirements for Recyclable Materials.

Section 261.6(a)(2) is being modified to add a reference to Part 268 to clarify that the requirements of Part 268 are applicable to hazardous wastes that are recycled. Section 267.20(b) is being modified to add a reference to Section 268.7(b)(6) to clarify that a recycling facility must comply with the record keeping requirements of Section 268.7(b)(6) and keep a one-time certification and notification related to recyclable materials being used in a manner constituting disposal.

These technical corrections/clarifications to the existing state regulations are applicable to the amendment of the corresponding federal regulations as published in the Federal Register on March 18, 2010 (75 FR 12989-13009) and April 13, 2012 (77 FR 22229-22232). These amendments are considered to be neither more nor less stringent than the current standards, and Colorado is not required to adopt these corrections. However, the Division recommends the adoption of these technical corrections to avoid any confusion or misunderstanding by the regulated community and the public.

Statement of Basis and Purpose Rulemaking Hearing of February 21, 2017

8.87 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 268.7 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of § 268.7 Testing, tracking, and recordkeeping requirements for generators, treaters, and disposal facilities.

These amendments to Section 268.7 clarify the generator waste analysis and notification requirements under RCRA's land disposal restrictions (LDR). Section 268.7(a)(1) is being amended to add a cross reference to § 262.11, in order to reduce duplicative testing requirements and clarify that that the two generator waste analysis functions can be performed concurrently, thus avoiding redundant waste analysis.

To provide additional flexibility to generators of hazardous waste, § 268.7(a)(1) is also being modified to clarify that if a generator does not want to determine, based on waste analysis or knowledge of the waste, whether the waste must be treated, the generator may assume that the generator is subject to the full array of LDR requirements. The generator then must send the waste to a RCRA-permitted hazardous waste treatment facility where the treatment facility must make the determination when the waste has met the LDR treatment standards (possibly even upon receipt as generated). A conforming change is also being made to the notification requirement in § 268.7(a)(2) for such cases.

Section 268.7(b)(6) is being amended to eliminate the requirement to submit notifications and certifications to the Division, and instead require that the information be placed in the treating/recycling facility's on-site files. In accordance with the requirements of § 268.7(b)(6), facilities (i.e., recyclers) must prepare and maintain notifications and certifications with the initial shipment of waste, and prepare new documentation only if the waste, the treatment process, or the receiving facility changes. Maintaining these records on-site, and available for inspection, provides sufficient documentation of waste treatment, and reduces the burden on the facility.

These amendments are equivalent to, or less stringent than the existing provisions, and Colorado is not required to adopt these provisions. Nevertheless, the Division believes that these amendments will provide some burden reduction to the regulated community, without compromising human health or environmental protection.

This Basis and Purpose incorporates by reference the applicable preamble language for the Environmental Protection Agency regulations that were published in the Federal Register at 71 FR 16862-16915, April 4, 2006 for which state analogs are being adopted at this time.

Statement of Basis and Purpose Rulemaking Hearing of May 16, 2017

8.88 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 6 is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-314(1), C.R.S.

Amendment of § 6.04 Annual Commission Fee

Section 6.04 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) is being amended at this time by revising paragraph (a) to reflect the annual Commission fee to be assessed for fiscal year 2017-2018. This rulemaking does not change the amounts of the annual Commission fees, but only changes the rules to reflect the 2017-2018 fiscal year.

Statement of Basis and Purpose Rulemaking Hearing of October 17, 2017

8.89 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 261, 262, 263, 264, 265, 267, and 273 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Hazardous Waste Export-Import Revisions

This rule amends existing regulations of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) regarding the export and import of hazardous waste from and into the United States. These amendments correspond to the Environmental Protection Agency (EPA) rule published in the Federal Register on November 28, 2016 {81 FR 85696-85729} and became effective in all states on December 31, 2016, since import and export requirements are administered by the Federal government as a foreign policy matter.

Because of the federal government's special role in matters of foreign policy, EPA does not authorize States to administer Federal import/export functions in any section of the RCRA hazardous waste regulations. This approach of having Federal, rather than State, administering of the import/export functions promotes national coordination, uniformity and the expeditious transmission of information between the United States and foreign countries.

The provisions of this rule took effect in all States on the December 31, 2016 effective date of the rule, since these import and export requirements will be administered by the Federal government as a foreign policy matter, and will not be administered by States.

Although States do not receive authorization to administer the Federal government's export functions in 40 CFR part 262 subpart E, import functions in 40 CFR part 262 subpart F, import/export functions in 40 CFR part 262 subpart H, or the import/export relation functions in any other section of the RCRA hazardous waste regulations, State programs are still required to adopt the provisions in this rule to maintain their equivalency with the Federal program (see 40 CFR 271.10(e) which will also be amended in this rule).

This rule contains many amendments to Part 262 Subpart H, both for clarity and organization, and replaces the regulations that are currently in Part 262 Subparts E and F with the more stringent Part 262 Subpart H regulations. The rule also contains conforming import and export-related amendments to Parts 260, 261, 262, 263, 264, 265, 266, 267, 271 and 273, almost all of which are more stringent.

The new requirements finalized in this rule will provide greater protection to human health and the environment by providing increased transparency, data sharing and more efficient compliance monitoring. Specifically, the changes to the existing regulations will:

- consolidate and streamline some of the requirements to minimize burden where possible;
- increase tracking of the transportation and disposition of individual imported and exported shipments of hazardous wastes and other materials, improving the Agency's ability to monitor compliance with applicable legal requirements;
- enable regulated parties and the government to benefit from the electronic submission of data; and
- consolidate under a unified regulation the process of notification with foreign governments, increasing efficiency and ensuring the process is consistent with the requirements of the OECD controlling transboundary movements of hazardous waste.

Colorado is not adopting the amendments to 40 CFR § 261.39 (Conditional Exclusion for Used, Broken Cathode Ray Tubes (CRTs) and Processed CRT Glass Undergoing Recycling), or the amendments to 40 CFR Part 267 (Standards for Owners and Operators of Hazardous Waste Facilities Operating Under a Standardized Permit), as Colorado has not adopted state analogs to these optional federal provisions.

This Basis and Purpose incorporates by reference the applicable portions of the preamble language for the EPA regulations as published in the Federal Register at 81 FR 85696-85729, November 28, 2016, as amended at 82 FR 41015-41016, August 29, 2017.

Statement of Basis and Purpose Rulemaking Hearing of October 17, 2017

8.89 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 262, 263, 264, and 265 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Hazardous Waste Electronic Manifest Rule

This rule amends existing regulations of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) regarding modification of the hazardous waste manifest system. These amendments correspond to the Environmental Protection Agency (EPA) rule that was published in the Federal Register on February 7, 2014 {79 FR 7518-7563}.

The use of paper manifest forms (EPA Forms 8700-22 and 8700-22A) is the currently authorized system used for tracking hazardous waste shipments. EPA's October 2014 rule established new requirements for authorizing the use of electronic manifests (or e-Manifests) as a means to track off-site shipments of hazardous waste from a generator's site to the site of the receipt and disposition of the hazardous waste. The final rule also implemented certain provisions of the Hazardous Waste Electronic Manifest Establishment Act, Public Law 112-195, which directed EPA to establish a national electronic manifest system (or e-Manifest system), and to impose reasonable user service fees as a means to fund the development and operation of the e-Manifest system. The goal of the rule is to transition away from the use of paper manifests and move to a fully electronic process for tracking hazardous waste shipments.

This rule does not change existing requirements for manifesting hazardous waste shipments. It merely authorizes the use of electronic manifests at such time as the system to receive them is built and operational. Establishment of an electronic tracking system for hazardous waste shipments will allow tracking to be conducted in a more cost-effective manner, and result in reduced paperwork and processing burdens to the regulated community, as well as to the regulators. The e-Manifest systems should also provide more timely access to manifest data and shipment information, and improved quality to the data that is shared among users, regulators, and their data management systems.

States with authorized RCRA programs under 40 CFR Part 271 are required to adopt program revisions equivalent to and consistent with the federal requirements, but EPA will implement these electronic manifest regulations unless and until the states are fully authorized to implement them in lieu of EPA.

Although the federal rule became effective as a final agency action on August 6, 2014, the rule stipulated that implementation and compliance date for the regulations would be delayed until such time as the e-Manifest system is shown to be ready for operation and the schedule of fees for manifest related services has been announced.

EPA's proposed rule regarding the e-Manifest User Fee Schedule was published in the Federal Register on July 26, 2016 (81 FR 49072-49110). EPA anticipates issuing the final e-Manifest user fee rule in late 2017 and deploying the e-Manifest information technology system in spring 2018.

Until EPA announces in a subsequent **Federal Register** document that the e-Manifest system is available for use, hazardous waste generators, transporters, and treatment, storage, and disposal facilities (TSDFs) must continue to comply with the current paper-based manifest system and use the existing paper manifest forms (i.e., EPA Forms 8700-22 and 8700-22A) for the off-site transportation of hazardous waste shipments.

This Basis and Purpose incorporates by reference the applicable portions of the preamble language for the EPA regulations as published in the Federal Register at 79 FR 7518-7563, February 7, 2014, and the preamble language for the amendment of § 263.20(a)(2) as published in the Federal Register at 81 FR 85696-85729, November 28, 2016.

Statement of Basis and Purpose Rulemaking Hearing of October 17, 2017

8.89 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 263.10 is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of § 263.10(b) requirement for transfer facilities handling only CESQG waste,

This amendment to paragraph (b) of section 263.10 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) will allow transfer facilities handling only conditionally exempt small quantity generator (CESQG) waste in compliance with the applicable Part 263 requirements for transfer facilities to store the waste for more than 10 days without becoming subject to regulation under Parts 100, 264, 265, 266 and 268 with respect to storage of those wastes. This amendment of section 263.10(b) is less stringent than the existing provision.

On May 18, 2010, the Solid and Hazardous Waste Commission adopted amendments to the Part Transfer Facility Regulations that required certain operational improvements at transfer facilities without creating an undue regulatory burden. The Part 263 amendments were developed as part of a review of the Part 263 regulations conducted by the Hazardous Materials and Waste Management Division (the "Division") for the purpose of updating and improving the existing regulations that apply to transfer facilities in Colorado in order to ensure protection of public health and safety and the environment.

As part of the Part 263 amendments, a new paragraph (b) was added to § 263.10, which specifies that transfer facilities handling only conditionally exempt small quantity generator (CESQG) waste are subject to the requirements of Subparts A (General Requirements), C (Hazardous Waste Discharges), D (Spills at Transfer Facilities) and E (Closure of a Transfer Facility). Transfer facilities handling only CESQG waste are not subject to the manifest requirements in Subpart B.

Pursuant to the requirements of § 263.12(b), a transporter who stores shipments of hazardous waste in containers meeting the requirements of § 262.30 at a transfer facility for a period of ten days or less is not subject to regulation under Parts 100, 264, 265, 266, and 268 with respect to the storage of those wastes, except as specifically referenced in Part 263 of these regulations.

Paragraph (b) of section 263.10 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) is being amended to specify that transfer facilities handling conditionally exempt small quantity generator (CESQG) waste in compliance with the applicable Part 263 requirements for transfer facilities are not subject to the 10-day storage limit for storage of these hazardous wastes. The transfer facilities remain subject to all other requirements of Subparts A, C, D & E of Part 263.

This amendment will provide transfer facilities handling CESQG waste with greater flexibility to manage the waste in a cost-effective manner while still ensuring protection of public health and safety and the environment.

Statement of Basis and Purpose Rulemaking Hearing of February 20, 2018

8.90 Basis and Purpose.

Listing Perfluorooctanoic acid and its anion perfluorooctanoate, and Perfluorooctane sulfonic acid and its anion, perfluorooctane sulfonate, in Part 261, Appendix VIII

These amendments to 6 CCR 1007-3, Part 261 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

The Colorado Hazardous Waste Regulations, 6 CCR 1007-3, Part 261, Subpart B, allow substances to be added to the list of hazardous constituents in the regulations, Part 261 Appendix VIII, if they have been shown in scientific studies to have toxic, carcinogenic, mutagenic or teratogenic effects on humans or other life forms. Hazardous constituents listed in the regulations may have impacts to human health or other life forms when released into the environment, and many of the hazardous constituents form the basis for identifying solid wastes as listed or characteristic hazardous wastes under the regulations.

This rule amends existing regulations of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) to add perfluorooctanoic acid and perfluorooctane sulfonic acid, as well as their anions, perfluorooctanoate and perfluorooctane sulfonate respectively, to the list of hazardous constituents in Appendix VIII to Part 261 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3). Addition of these chemicals to the Appendix VIII Hazardous Constituent list ensures any hazards associated with the release of perfluorooctanoic acid and/or perfluorooctane sulfonic acid to the environment at facilities that are either under an existing permit or order for corrective action, or that may have a future release of hazardous waste to the environment and be subject to a permit or order, will be adequately characterized and remediated as necessary to ensure protection of human health and the environment.

Overview of PFOA and PFOS

Perfluorooctanoic acid (PFOA) and Perfluorooctane sulfonic acid (PFOS) are synthetic, eight carbon non-polymer organic compounds that are part of a group of toxic chemicals known as perfluoroalkyl and polyfluoroalkyl substances (PFAS). Perfluorinated alkyl substances like PFOA and PFOS are fully fluorinated carbon chain molecules with a basic structure consisting of a chain (or tail) of two or more carbon atoms with a charged functional group head attached at one end. Fluorine atoms are attached to all possible bonding sites along the carbon chain of the tail, except for one bonding site on the last carbon where the functional group head, a carboxylic acid for PFOA and a sulfonic acid for PFOS, is attached. PFOA and PFOA are extremely stable compounds, with their stability derived from the carbon-fluorine bond, the shortest and strongest covalent bond in organic chemistry. They are solid, white powders at room temperature and have low vapor pressures. These compounds possess hydrophobic, oleophobic and surfactant properties and are strong acids that readily dissociate in water. Once released into the environment, PFOA and PFOS typically exist as their negatively charged anions, perfluorooctanoate and perfluorooctane sulfonate. The negative anions have different physical or chemical properties that generally control their fate and transport and potential for human health and ecological effects. For example, the perfluorooctanoate anion is highly water soluble with a negligible vapor pressure, whereas perfluorooctanoic acid has very low water solubility and a sufficient vapor pressure to partition out of water into air.

Due to their physical and chemical properties, PFOA and PFOS have a wide variety of uses, and have been produced in the United States since the 1940's. They are used in some industrial processes and a variety of consumer products to make them resistant to heat, oil, stains, grease and/or water. PFOS and PFOA are byproducts of other commercial products meaning they are released in the environment when other products are made, used, or discarded. PFOA has been used historically as a surfactant in the emulsion polymerization of fluoropolymers (e.g. manufacturing of Teflon) and as an additive in other protective coatings. PFOA is also generated as a degradation product of other perfluorinated compounds. PFOS is used in a variety of surface protection products, including textiles and leather, paper and food products, metal plating and clothing, and other materials to make them stain, soil and/or water resistant (e.g. Scotchguard). PFOS has also historically been an ingredient in firefighting foams (e.g. aqueous film forming foam (AFFF)) and alcohol-type concentrate foams.

Due to industry and regulatory concerns about the potential health and environmental impacts of these compounds, there has been a reduction in the manufacture and use of PFOA and PFOS in the United States. In May 2000, 3M the principal worldwide manufacturer and sole US manufacturer of PFOS announced a voluntary phase-out of perfluorooctanyl chemistries, which included PFOS and PFOA. Phasing out of these chemicals by 3M was reportedly nearly complete in 2002 with the remaining production terminated by 2008. Additionally, the US EPA initiated a PFOA Stewardship Program in 2006 aimed at committing eight major manufacturing companies to reducing PFOA and other related compound emissions and their use in manufacturing products. The Stewardship Program was very successful, meeting a 95% reduction by 2010 and elimination by 2015. Despite these phase out initiatives however, PFOA and PFOS continue to be produced internationally in China and Russia. Additionally, due to the long shelf life of PFOS-based AFFF foam, these compounds may still be stored and in use at various facilities. Exposure to PFOA and PFOS in the United States remains possible due to their legacy uses, existing and legacy uses on imported goods, degradation of precursors, and high persistence in the environment and human body.

Environmental releases of PFOS and PFOA include air emissions and dispersion from industrial sources, spills of chemical products or wastes, and the disposal of manufacturing or consumer wastes and wastewaters. For example, leachate from some municipal solid waste landfills has been shown to be a source of PFAS release to the environment, with the presence of some PFAS reportedly due to the disposal of consumer goods treated with water repelling or stain resistant coating. Additionally, discharges of consumer and industrial PFAS-containing wastes, including landfill leachates and firefighting foams, to wastewater treatment plants (WWTP) results in other possible releases to the environment. WWTPs generally do not treat PFAS like PFOA and PFOS, passing them through to surface and/or groundwater sources, or to the soil if sewage sludge is subsequently applied to agricultural land through biosolids application. Finally, firefighting foam used for extinguishing flammable liquid fires, including AFFF, comprise another significant source of environmental release. These releases include not only use of the foam during firefighting or training exercises, but also releases due to equipment malfunctions, leaks in distribution systems and firefighting foam system testing and calibration checks.

PFOS and PFOA are mobile, persistent and bioaccumulative and are not known to degrade in the environment. They are considered terminal PFAS meaning other long chain PFAS will degrade to them, but no further degradation products will form from them under environmental conditions once they are released. PFOS and PFOA have been detected in water, wildlife, and humans worldwide. The primary way people come in contact with these compounds is through ingestion of food, and water (drinking, cooking, or incidental use of contaminated water). PFOA and PFOS are not removed by heating water and can increase in concentration when the water is boiled. Because these compounds generally have low vapor pressure, releases of them to the environment are not expected to be present in air and inhaled. However, inhalation can be a significant route of exposure if it occurs near large manufacturing sources of the compounds and some exposure may also occur through household dust inhalation, or ingestion through hand to mouth transfer for children. Additionally, dermal contact is not a significant pathway for human exposure.

Health Effects

The US EPA considers PFOA and PFOS to be emerging contaminants due to their perceived, potential, or real threat to human health and the environment. It issued Drinking Water Lifetime Health Advisories (HAs) for the compounds in 2016 (see https://www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos). EPA develops health advisories to provide information on contaminants that can cause human health effects and are known or anticipated to occur in drinking water. The HAs for PFOA and PFOS were based on best available peer-reviewed studies of the effects of PFOA and PFOS on laboratory animals (rats and mice) as well as epidemiological studies of human populations that have been exposed to PFAS. Scientists are not yet certain about the possible health effects resulting from human exposure to PFAS at levels typically found in our water and food, however PFOS and PFOA have been more widely studied than other PFAS. Studies indicate that exposure to PFOA and PFOS over certain levels may result in adverse health effects, including developmental effects to fetuses during pregnancy or to breastfed infants, cancer, liver effects, immune effects, thyroid effects and other effects.

The scientific studies used by the US EPA in developing the HAs for PFOA and PFOS are available as "Health Effects Support Document for Perfluorooctanoic Acid (PFOA)" EPA 822-R-16-003 May, 2016 https://www.epa.gov/sites/production/files/2016-05/documents/pfoa_hesd_final_508.pdf and "Health Effects Support Document for Perfluorooctane Sulfonate (PFOS)" EPA 822-R-16-002 May 2016 https://www.epa.gov/sites/production/files/2016-05/documents/pfos_hesd_final_508.pdf. These documents detail the available scientific studies, risk assessment guidance and toxicological factors that show PFOA and PFOS have toxic, carcinogenic, mutagenic or teratogenic effects on humans or other life forms. Specific conclusions regarding the human health and animal studies in the support documents for PFOA and PFOS are briefly summarized below.

Adverse health effects observed following exposure to PFOA and PFOS are the same or similar and include effects in humans on serum lipids, birth weight, and serum antibodies. Additionally these compounds may affect the developing fetus and child, including possible changes in growth, learning, and behavior. These effects also include decreased fertility and interference with the body's natural hormones, increased cholesterol, effects on the immune system, and increased cancer risk.

Human Studies

Human epidemiology data report associations between PFOA exposure and high cholesterol, increased liver enzymes, decreased vaccination response, thyroid disorders, pregnancy-induced hypertension and preeclampsia and cancer (testicular and kidney). Epidemiology data report associations between PFOS exposure and high cholesterol and reproductive and developmental parameters.

Animal Studies

Animal studies on PFOS and PFOA demonstrate similar health effects. Additionally, some of the animal studies show common effects on the liver, neonate development, and responses to immunological challenges. Long-term animal studies show that both compounds are also associated with tumors. For the most part, laboratory animals exposed to high doses of PFOA or PFOS have shown changes in the liver, thyroid, and pancreatic function, as well as some changes in hormone levels. Because animals and humans do not always process chemicals the same way, scientific methods are used to account for these differences and ensure their conclusions about chemicals are protective of the public. Neither PFOA nor PFOS are readily eliminated from the body; their respective half-lives are 4.1 and 8.67 years. Even short term exposures to these PFAS can result in a body burden that persists for years and that can increase with additional exposures.

EPA's risk assessment guidelines state that, as a general matter, a single exposure to a developmental toxin, at a critical time in development can produce an adverse effect. As such, EPA derived reference doses (RfDs) for both PFOA and PFOS based on developmental endpoints (reduced ossification and accelerated puberty in males for PFOA and decreased pup birth weight for PFOS). Because the RfDs for both PFOA and PFOS are based on similar developmental effects and are numerically identical, when these two chemicals occur at the same time and location in a drinking water source, a conservative and health-protective approach recommended by the EPA is to sum their exposure collectively.

While the associations for most epidemiology endpoints are mixed, the weight of evidence for human studies supports the conclusion that PFOS and PFOA exposure is a human health hazard. At this time, the US EPA concludes that the human health studies are adequate for use qualitatively in the identification hazard and are supportive of the findings in laboratory animals. PFOS and PFOA have been shown in scientific studies to be toxic and potentially carcinogenic to humans satisfying the regulatory criteria for listing.

Regulatory Evaluation

These amendments incorporate PFOA and PFOS and their respective anions into the list of hazardous constituents in the Colorado Hazardous Waste Regulations (6 CCR 1007-3), Part 261 Appendix VIII. Many hazardous constituents form the basis for characteristic and/or listed hazardous waste in the regulations (see 6 CCR 1007-3, Part 261 Appendix VII), and solid wastes may be listed if, after considering several factors, they contain any Appendix VIII hazardous constituents and pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported or disposed of, or otherwise managed in accordance with 6 CCR 1007-3, Section 261.11(3).

These amendments are designed only to incorporate PFOA and PFOS into the regulations as hazardous constituents. Additonal hazardous waste listings or characteristics based on PFOA or PFOS are not being proposed with these amendments. Under these amendments, if PFOA or PFOS are released into the environment, the release would not be considered a release of a hazardous waste unless the solid waste released was already a listed or characteristic hazardous waste as currently defined in the regulations.

However, a facility that is seeking, that has or had, or that should have had a hazardous waste permit, or that has had a release of hazardous waste to the environment, must complete corrective action at the facility as necessary to characterize and assess the release of any Appendix VIII hazardous constituents to the surface water, groundwater, or soil in accordance with 6 CCR 1007-3, Section 100.41(d) (RCRA 3004(u)) or 6 CCR 1007-3, Section 265.5 (RCRA 3008(h)). Listings of PFOS and PFOA as hazardous constituents in the Colorado Hazardous Waste Regulations (6 CCR 1007-3) under these amendments will therefore provide greater protection to human health and the environment at these facilities because these compounds will need to be considered and included as necessary in site-wide corrective action. That is, any release of PFOA or PFOS at a facility under a hazardous waste order or permit, must be characterized and assessed, and if necessary addressed though remedial action(s) to protect human health and/or the environment.

Corrective action at hazardous waste management facilities under these amendments will be implemented in accordance with the regulations using existing Hazardous Materials and Waste Management Division policy. No changes in corrective action policy are anticipated or needed to address the addition of PFOA and PFOS to Appendix VIII of the Colorado Hazardous Waste Regulations (6 CCR 1007-3). Sampling and analytical methods for the detection and identification of PFOS and PFOA in groundwater, surface water and soil are available using EPA Method 537 Liquid Chromotography Tandem Mass Spectroscopy, which possess detection limits equal to 10 ppt in drinking water. EPA's advisory level of 70 ppt for combined PFOA and PFOS in drinking water is also considered protective under unrestricted use or a level at which adverse health effects are not anticipated to occur over human lifetime. Additionally, advancement of analytical technologies, including real-time analysis are under development. Available treatement technologies for PFOS or PFOA soil contamination include excavation, in-situ binding to reduce leaching, and incineration. Available treatment technologies for surface and groundwater include membrane (reverse osmosis) and Granular Activated Carbon treatment.

The Commission has evaluated the information presented at the rulemaking hearing, as well as the information in the Statement of Basis and Purpose. The Commission considers this information sufficient to justify adopting the proposed rule. The Commission finds that this rule is necessary to protect public health and the environment.

Statement of Basis and Purpose Rulemaking Hearing of May 15, 2018

8.91 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 6 is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-314(1), C.R.S.

Amendment of § 6.04 Annual Commission Fee

Section 6.04 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) is being amended at this time by revising paragraph (a) to reflect the annual Commission fee to be assessed for fiscal year 2018-2019. This rulemaking does not change the amounts of the annual Commission fees, but only changes the rules to reflect the 2018-2019 fiscal year.

Statement of Basis and Purpose Rulemaking Hearing of May 15, 2018

8.91 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 261, 262, 263, 264, 265, 267, 268, 273, 279, 99 and 100 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Hazardous Waste Generator Improvements Rule

These amendments to the Colorado Hazardous Waste Regulations (6 CCR 1007-3) finalize revisions to the state's hazardous waste generator regulatory program. These amendments correspond to the Environmental Protection Agency (EPA) rule published in the Federal Register on November 28, 2016 {81 FR 85732-85829}, and which became effective on May 30, 2017.

The primary intent of these amendments is to foster improved compliance by hazardous waste generators in the identification and management of the hazardous waste they generate and, as a result, improve protection of human health and the environment. The objectives of these revisions include:

- reorganizing the hazardous waste generator regulations to make them more user-friendly and thus improve their usability by the regulated community;
- providing a better understanding of how the RCRA hazardous waste generator regulatory program works;
- addressing the gaps in the existing regulations to strengthen environmental protection;
- providing greater flexibility for hazardous waste generators to manage their hazardous waste in a cost-effective and protective manner; and
- making technical corrections and conforming changes to address inadvertent errors and remove obsolete references to programs that no longer exist.

General organizational changes being adopted as part of this rulemaking include the following:

1) Changing the name of Conditionally Exempt Small Quantity Generator (CESQG) to Very Small Quantity Generator (VSQG)

2) Integrating the generator requirements formerly found at § 261.5 (Special requirements for hazardous waste generated by conditionally exempt small quantity generators) into new § 262.13 (Generator Category Determination) and § 262.14 (Conditions for exemption for a VSQG) in the Part 262 generator regulations. With the addition of the new § 262.13 (Generator Category Determination), the existing § 262.13 (Generator Annual Fees) is being renumbered as § 262.9.

3) Separating the existing regulations at § 262.34 (Accumulation time) for Small Quantity Generators (SQGs), Large Quantity Generators (LQGs), and Satellite Accumulation Areas (SAAs) into three new sections:

   a) § 262.15 – Satellite accumulation area regulations for small and large quantity generators;

      Note: Colorado is specifying in § 262.15(a)(4) that the temporary venting of a container may be allowed on a case-by-case basis with prior written approval from the Division.

b) § 262.16 – Conditions for exemption for an SQG that accumulates hazardous waste; and

c) § 262.17 – Conditions for exemption for an LQG that accumulates hazardous waste.

4) Incorporating the text of relevant Part 265 regulations, where reasonable, into these new sections, rather than merely cross-referencing them.

Several of the revisions included in this rulemaking are more stringent than the current regulations, and Colorado is required to adopt equivalent provisions to the federal standards. These include the following:

1) **Marking & Labeling** – Requires SQGs, LQGs and transfer facilities to better define the risks of hazardous wastes accumulated in tanks, containers, drip pads, and containment buildings, as well as when hazardous waste is accumulated in satellite accumulation areas. These new marking and labeling requirements for waste accumulation units are being implemented to enhance 3 critical areas: risk communication; emergency preparedness and prevention; and the accuracy of hazardous waste determinations. These new, more stringent labeling requirements include the following provisions:

a) § 262.14(a)(5)(viii)(B)(2) – VSQG container labeling requirements;

b) § 262.15(a)(5)(ii) – SQG and LQG labeling requirements for containers in satellite accumulation areas;

c) § 262.16(b)(5) – SQG Accumulation of hazardous waste in containment buildings;

d) § 262.16(b)(6)(i)(B) – SQG container labeling requirements;

e) § 262.16(b)(6)(ii)(B) – SQG tank labeling requirements;

f) § 262.17(a)(4) – LQG Accumulation of hazardous waste in containment buildings;

g) § 262.17(a)(5)(i)(B) – LQG container labeling requirements;

h) § 262.17(a)(5)(ii)(B) – LQG tank labeling requirements; and

i) § 262.17(c)(4)(iv)(B) – LQG tank and container labeling requirements for F006 waste.

2) **Closure Notification Requirements for LQGs {§ 262.17(a)(8)}** – Requires LQGs to notify EPA or their authorized state when they plan to close their facilities.

a) Closure of a waste accumulation unit – Requires LQGs to place a notice in their operating record within 30 days after closure identifying the location of the unit with the facility, or meet closure performance standards and notify the Department.

b) Closure of the facility – Requires the LQG to notify the Department no later than 30 days prior to closing the facility. The LQG must also notify the Department within 90 days after closing the facility that it has complied with closure performance standards or notify if it can't complete a clean closure of the facility. LQGs that fail to complete clean closure of the facility are required to complete closure as a landfill under § 265.310 in the case of a container, tank or containment building, or under § 265.445(b) for a facility with drip pads.

3) **Re-notification Requirements for SQGs {§ 262.18(d)}** – Requires SQGs to re-notify every four years. Colorado is also requiring VSQGs that generate 3 gallons or more in a calendar year of hazardous waste codes F001, F002, F004, and/or F005 to re-notify the Department starting in 2021 and every four years thereafter using EPA Form 8700-12. This re-notification for VSQGs and SQGs must be submitted to the Department by September 1st of each year in which re-notifications are required, unless the VSQG or SQG has submitted an updated notification within the last four years.

4) **Biennial Reporting Requirements {§ 262.41)}** – Requires LQGs to submit a biennial report that identifies all of the hazardous wastes generated in the calendar year, not just for the months the facility was an LQG.

5) **Preparation of Contingency Plan Quick Reference Guide {§ 262.261(h)}** – Requires new LQGs and LQGs updating their contingency plans to prepare a quick reference guide for their contingency plans to assist responders in an emergency. The Quick Reference Guide must contain the following elements:

a) Types/names of hazardous waste and associated hazards;

b) Estimated maximum amounts of hazardous wastes on-site at the facility;

c) Identification of hazardous wastes requiring unique/special treatment;

d) Map showing where hazardous wastes are generated, accumulated and/or stored at the facility;

e) Map of facility and surroundings to identify routes or access and evacuation;

f) Locations of water supply (e.g., fire hydrant and its flow rate);

g) Identification of on-site notification systems (e.g., fire alarms, smoke alarms); and

h) Name of emergency coordinator(s) and 24-hour emergency telephone number(s).

6) **Biennial Reporting Requirements for Owners or Operators of Facilities that Recycle Hazardous Waste Without Storing It {§ 261.6(c)(2)}** – Requires facilities that recycle hazardous waste without storing the waste to prepare and submit a Biennial Report.

A few of the proposed revisions included in this rulemaking are less stringent than the current hazardous waste regulation, and Colorado is not required to adopt these changes. These revisions include the following:

1) **LQG Consolidation of VSQG Wastes {§ 262.14(a)(5)(viii) and § 262.17(f)}** – Allows VSQGs to voluntarily send hazardous waste to LQGs under the control of the same person.

2) **Waiver of the 50-foot Setback Requirement {§ 262.17(a)(1)(vi)}**– Allows LQGs to apply for a waiver from their local fire department to accumulate ignitable and reactive wastes within the 50 foot facility boundary.

Colorado is not adopting amendments regarding the following portions of the federal rule:

1) **Episodic Generation Requirements {40 CFR Part 262, Subpart L}**. The Federal rule implements Alternative Standards for Episodic Generation at 40 CFR Part 262, Subpart L that allows VSQGs and SQGs to conditionally maintain their generator category if they experience an episodic hazardous waste generation event that causes them to exceed the generation quantity limit for their category in a particular month which would subject them to more stringent generator requirements. The new Federal rule is a complex system of notification and management requirements for planned events and unplanned events, and only allows one event per year with an option to petition for a second event. All waste generated during an episodic event has different labeling and tracking requirements from the regularly generated waste at the facility.

   The new federal requirements seem like an unnecessarily complicated way to deal with episodic generation events that have not been a problematic issue in Colorado. The Division requires generators to comply with the requirements for whatever generator category they are in any particular month. The Division has always advised that as a best management practice, generators who generate near the limit for a particular category comply with the more stringent requirements in order to ensure that if they generate in excess of the allowable limit, they will already be in compliance.

   If a facility experiences an unusual episodic event, the Division has worked with these facilities to ensure that they quickly and easily comply with the required regulatory standards for that one-time event. This is accomplished through guidance documents which include contingency plan templates, training templates and additional material designed to help generators comply with more stringent requirements.

   Adoption of the new federal episodic generation event regulations will not afford any great relief to generators, are unnecessarily complex, and would be difficult to enforce. Colorado prefers to remain more stringent in order to ensure protection of human health and the environment in the management of these hazardous wastes.

   However, Colorado is adopting a new Part 262, subpart L in order to clarify that generators experiencing an episodic event must comply with the requirements of the generator category that applies during any given month. Colorado is also allowing VSQGs or SQGs who experience one episodic event during a calendar year that subjects them to LQG status to maintain their generator category and be exempt from the requirement to file a biennial report, as long as they comply with all of the other LQG requirements.

2) **Amendment of § 261.420** – Colorado is not adopting the addition of paragraph (g) to section 261.420, as Colorado has not adopted the optional Subpart M Standards (Emergency Preparedness and Response for Management of Excluded Hazardous Secondary Materials) that were established as part of the Revisions to the Definition of Solid Waste rulemaking of January 13, 2015 (80 FR 1694-1814).

3) **Amendment of §§ 262.200-262.216** – Colorado is not adopting these revisions, as Colorado has not adopted the optional Subpart K provisions (Subpart K – Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities) established as part of the Academic Laboratories Generator Standards rulemaking of December 1, 2008 (73 FR 72912-72960).

Additional items included in this rulemaking:

1) **VSQG Waste Collection Facilities** – Colorado is eliminating Section 263.10(b) to clarify that VSQG waste collection facilities are not considered transfer facilities under the Colorado Hazardous Waste Regulations (6 CCR 1007-3). VSQG Waste Collection Facilities receiving hazardous waste from non-affiliated generators in Colorado will be individually reviewed and approved by the Department pursuant to 262.14(a)(5)(iii).

   Allowing VSQGs to send their hazardous waste to a waste collection facility will help ease the financial and administrative burden for VQGs and encourage responsible waste management, treatment, and disposal.

2) **Independent Requirements {§ 262.10}** – One of the objectives of this rule was to clarify which requirements for hazardous waste generators are conditions for exemption from the requirement to obtain a permit for the storage of hazardous waste on site at the generator's facility and which requirements are independent requirements that all generators of hazardous waste must comply with regardless of whether they store hazardous waste on site. Colorado has expanded the list of independent requirements for generators from that of the Federal rule for requirements that are unique to Colorado and to clarify that notification requirements of Part 99 and the land disposal restriction requirements of Part 268 are considered independent requirements in Colorado. The independent requirements that are unique to Colorado are: Section 262.9 (Generator Annual Fees) and Section 262.43 (Additional Reporting).

3) **Retention of more stringent provisions**. As part of this rulemaking, Colorado is also retaining the following more stringent provisions that currently exist in § 261.5, § 262.34, § 262.52, and § 262.174 of the regulations:

   a) Prohibition of CESQG to dispose of waste on-site {§ 261.5(f)(3)(iv) and (g)(3)(iv)} – Colorado regulations currently specify that a conditionally exempt small quantity generator of hazardous waste may not dispose of his/her hazardous waste on-site. This requirement for VSQGs is now located at § 262.14(a)(5) of the regulations.

   b) Requirement for CESQG generating F001, F002, F004, and F005 waste to notify{§ 261.5(b)(2)} – Colorado regulations currently require CESQGs that generate 3 gallons or more per calendar year of hazardous waste codes F001, F002, F004 and/or F005 to notify the Department of their hazardous waste activities and obtain an EPA Identification Number. This requirement for VSQGs is now located at § 262.10(a)(1)(i)(E) of the regulations.

   c) Requirement to complete Self-Certification Checklist {§ 261.5(b)(4) and § 262.43(b)} – Colorado regulations currently require any generator, including CESQGs, that receive a Self-Certification Checklist from the Department to complete and return the checklist within the timeframe specified in the instructions. This requirement is now located at § 262.10(a)(1)(i)(D) for VSQGs, § 262.10(a)(1)(ii)(H) for SQGs, and § 262.10(a)(1)(iii)(H) for LQGs.

d) Requirement to document training for SQGs {§ 262.34(d)(5)(iii)} – Colorado regulations currently require documentation of training for SQGs of hazardous waste, and make training performance-based. This requirement for SQGs is now located at § 262.16(b)(9).

e) Satellite accumulation area time limit. {§ 262.34(c)(2) and § 262.34(g)(2)} – Unlike the federal requirement which allows 3 days, Colorado regulations require a generator that manages hazardous waste in satellite accumulation containers to move that container to the 180/270 or 90-day accumulation area immediately (i.e., within 24-hours) from when the 55-gallon limit is reached. This requirement is now located at § 262.15(a)(6).

f) Requirement for CESQGs to minimize releases {§ 261.5(b)(5) and 265.31(a)} – Colorado regulations require all generators, including CESQGs, to maintain and operate their facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents. This requirement is now located at § 262.14(d) for VSQGs, § 262.16(b)(8) for SQGs, and § 262.17(a)(6) for LQGs.

(g) Expanded list of weekly inspection requirements {§ 265.174} – Colorado regulations require a thorough inspection of hazardous waste containers to ensure that all of the Part 265 Subpart I requirements regarding use and management of containers and the applicable labeling requirements of § 262.34 are being met. These regulations also require that problems identified during the inspection be remedied. These requirements are now also located at § 262.16(b)(2)(iv) for SQGs, and § 262.17(a)(1)(v) for LQGs.

(h) Additional Contingency Plan Requirement {§ 262.261(g)} – Colorado regulations also require LQGs of hazardous waste to identify the fire protection district responsible for providing fire protection services to be identified in the contingency plan. If a facility is not within a fire protection district, the LQG must state that in their contingency plan, and operate under their own fire protection plan that has been approved by the Department. Colorado regulations also require identification of the local emergency planning committee (LEPC) for the area where the facility is located. In addition to § 265.52(g), this requirement is now also located at § 262.261(g).

4) **Replacement of References to Colorado Hazardous Waste Notification Form** – Colorado is revising the Colorado Hazardous Waste Regulations (6 CCR 1007-3) to remove all references to the Colorado Hazardous Waste Notification Form, and replace with a reference to EPA Form 8700-12.

5) **Amendment of § 100.33 Hazardous Waste Notification Fees**. Section 100.33 is being amended to clarify that generators filing electronically with the Division to change their generator status are not subject to the $120 notification processing fee.

The Commission has evaluated the information presented at the rulemaking hearing, as well as the information in the Statement of Basis and Purpose. The Commission considers this information sufficient to justify adopting the proposed rule. The Commission finds that this rule is necessary to protect the public health and environment of the state.

This Basis and Purpose incorporates by reference the applicable portions of the preamble language for the EPA regulations as published in the Federal Register at 81 FR 85732-85829, November 28, 2016.

Statement of Basis and Purpose Rulemaking Hearing of November 20, 2018

8.92 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 262 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Hazardous Waste Generator Improvements Rule Amendments

These amendments correct technical errors and inadvertent omissions that were identified after Colorado adopted state analogs to the federal Hazardous Waste Generator Improvements Rule on May 15, 2018.

These amendments correct typographical errors and inadvertent omissions that exist in §§ 262.10, 262.15, 262.16, 262.17, 262.18, 262.20, 262.230, 262.251, 262.261 and the Table of Contents for Part 262 of the current regulations.

The state requirements for very small quantity generators (VSQGs) of hazardous waste in Colorado are more stringent than the federal provisions. The Commission has evaluated the information presented at the rulemaking hearing, as well as the information in the Statement of Basis and Purpose. The Commission considers this information sufficient to justify adopting the proposed rule. The Commission finds that this rule is necessary to protect the public health and environment of the state.

Statement of Basis and Purpose Rulemaking Hearing of February 19, 2019

8.93 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 262 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of the Section 262.14(a)

These amendments correct technical errors and inadvertent omissions in paragraph (a) of Section 262.14 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) that were identified after Colorado adopted state analogs to the federal Hazardous Waste Generator Improvements Rule on May 15, 2018, and after the previous HW Generator Improvement Amendments had been filed for the November 20, 2018 rulemaking hearing.

Paragraph (a) of the Section 262.14 conditions for exemption for a very small quantity generator (VSQG) of hazardous waste is being amended to:

1) Exempt VSQGs of hazardous waste from complying with the requirements of Part 263 (Standards Applicable to Transporters of Hazardous Waste). As § 262.14(a) is currently written, VSQGs are subject to the Part 263 requirements. VSQGs are not required to manifest their hazardous waste under RCRA, and it is not the Division's intent to require VSQGs to do so under the state regulations. This amendment corrects this issue.

2) Clarify that **only** VSQGs generating 3 gallons or more of F001, F002, F004, and/or F005 hazardous waste in a calendar year are required to comply with the requirements of § 262.18 (EPA identification numbers and re-notification for large quantity generators, small quantity generators, and very small quantity generators that generate 3 gallons or more in a calendar year of hazardous waste codes F001, F002, F004, and/or F005). As currently written, § 262.14(a) implies that **all** VSQGs are required to comply with the requirements of § 262.18. This amendment corrects the VSQG exemption to specify that only VSQGs generating 3 gallons or more of F001, F002, F004, and/or F005 hazardous waste in a calendar year are required to comply with the requirements of § 262.18.

This amendment is more stringent than the federal regulations. The Commission has evaluated the information presented at the rulemaking hearing, as well as the information in the Statement of Basis and Purpose. The Commission considers this information sufficient to justify adopting the proposed rule. The Commission finds that this rule is necessary to protect public health and the environment.

3) Add a reference to § 262.43 in Section 262.14 to require VSQGs to complete and return a Self-Certification Checklist if requested by the Division. VSQGs are already required to comply with the Self-Certification requirements of § 262.43 through § 262.10(a)(1)(i)(E). This amendment simply provides further clarification of this requirement.

Statement of Basis and Purpose Rulemaking Hearing of February 19, 2019

8.93 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 279 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of the Part 279 Standards for the Management of Used Oil

These amendments revise sections 279.1, 279.10, 279.11, 279.22, 279.44, 279.45, 279.52, 279.54 279.55, 279. 64, and 279.74 of Colorado's Part 279 Standards for the Management of Use Oil.

With the exception of the revisions to section 279.10, these amendments consist mainly of corrections to minor typographical and technical errors that exist in the Part 279 regulations.

The more substantive changes to section 279.10 include the following:

1) **Amendment of Section 279.10(i) – Applicability of the Used Oil Management Standards to PCB contaminated used oil**. Paragraph (i) of section 279.10 is being amended to clarify the applicability of the RCRA used oil management standards to used oil containing PCBs. The amendment clarifies that used oil that contains less than 50 ppm of PCBs is generally subject to regulation under the RCRA used oil management standards. However, the amendment notes that the Toxic Substances Control Act (TSCA) prohibition against the dilution of PCB concentrations below regulatory thresholds (40 CFR 761.1(b)(5)) applies to the dilution of PCB-containing used oil Used oil, therefore, that contains, or contained prior to dilution, 50 ppm or greater of PCBs in not subject to regulation under the RCRA used oil management standards, because the TSCA regulations at 40 CFR Part 761 provide comprehensive management of such used oil.

2) **Removal of Section 279.10(b)(3) – Mixtures of used oil and very small quantity generator hazardous waste**. The Division is removing the provision at § 279.10(b)(3) to clarify the state's intent to be more stringent than the federal requirements regarding the management of mixtures of used oil and listed hazardous waste from very small quantity generators (VSQGs) of hazardous waste.

   Pursuant to the federal provisions of §§ 262.13(f)(iii) and 279.10(b)(3), mixtures of VSQG listed hazardous waste and used oil are exempt from regulation under the hazardous waste management regulations, and may be managed as used oil under the used oil management standards of 40 CFR Part 279.

The Division believes that VSQG generated mixtures of used oil and listed hazardous waste should be managed in accordance with the same requirements applicable to mixtures of used oil and listed hazardous waste generated by small quantity generators and large quantity generators. Allowing VSQG generated mixtures of used oil and listed hazardous waste to be managed as used oil makes compliance assurance difficult and significantly reduces a VSQG's incentive to minimize the amount of listed hazardous waste it generates, and may also lead to management of the waste in a manner that is not protective of human health and the environment.

In adopting state analogs to the federal hazardous waste generator improvements rule on May 15, 2018, Colorado included more stringent language in § 262.13(f) regarding VSQG mixtures of used oil and hazardous waste.

Pursuant to the requirements of 6 CCR 1007-3, § 262.13(f)(iii), if a VSQG's characteristic hazardous wastes are mixed with used oil, and the resulting mixture does not exhibit any hazardous waste characteristic, the mixture is subject to the Part 279 used oil regulations. Any material produced from such a mixture by processing, blending, or other treatment is also regulated under the Part 279 regulations. However, pursuant to 6 CCR 1007-3, § 262.13(f)(iv), if a VSQG mixes any hazardous waste listed in subpart D of Part 261 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) with used oil, the resultant mixture is a newly generated listed hazardous waste and must be managed as hazardous waste. The VSQG must count both the resultant mixture amount plus all other hazardous waste generated in the calendar month to determine whether the total quantity exceeds the very small quantity generator calendar month quantity limits identified in the definition of generator categories found in § 260.10 of these regulations. If so, to remain exempt from the permitting, interim status, and operating standards, the very small quantity generator must meet the conditions for exemption applicable to either a small quantity generator or a large quantity generator. The very small quantity generator must also comply with the applicable independent requirements for either a small quantity generator or a large quantity generator.

In its adoption of the hazardous waste generator improvements rule, Colorado inadvertently failed to amend § 279.10(b)(3) to be consistent with the more stringent provisions of § 262.13(f), and to include a discussion of this more stringent provision in the Statement of Basis and Purpose for the May 18, 2018 rulemaking.

This amendment removing the provision at § 279.10(b)(3) clarifies the state's intent pursuant to § 262.13(f)(iv) to be more stringent than the federal requirements regarding the management of VSQG mixtures of used oil and hazardous waste.

This amendment is more stringent than the federal regulations. The Commission has evaluated the information presented at the rulemaking hearing, as well as the information in the Statement of Basis and Purpose. The Commission considers this information sufficient to justify adopting the proposed rule. The Commission finds that this rule is necessary to protect public health and the environment.

This Basis and Purpose incorporates by reference the applicable portions of the preamble language for the EPA regulations as published in the Federal Register at 68 FR 44659-44665, July 30, 2003 regarding the amendment of Section 279.10(i).

Statement of Basis and Purpose Rulemaking Hearing of February 19, 2019

8.93 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 262, 263, 264, and 265 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

User Fees for the Electronic Hazardous Waste Manifest System and Amendments to the Manifest Regulations

These amendments to the Colorado Hazardous Waste Regulations (6 CCR 1007-3) correspond to the Environmental Protection Agency (EPA) Hazardous Waste Electronic Manifest User Fee rule published in the Federal Register on January 3, 2018 {83 FR 420-462}, and which became effective on June 30, 2018.

The January 3, 2018 federal rule established the methodology the EPA will use to determine and revise the user fees applicable to the electronic and paper manifests to be submitted to the national electronic manifest system (e-Manifest system) that EPA developed under the Hazardous Waste Electronic Manifest Establishment Act, P.L. 112-195. That Act directed EPA to establish a national electronic manifest system (or e-Manifest system) and to impose reasonable user service fees as a means to fund the development and operation of the e-Manifest system.

EPA's Hazardous Waste Electronic Manifest rule was published in the Federal Register on February 7, 2014 {79 FR 7518-7563}. Corresponding amendments to the Colorado Hazardous Waste Regulations were adopted by the Colorado Solid and Hazardous Waste Commission on October 17, 2017, and became effective on November 30, 2017.

EPA began operation of its e-Manifest system on June 30, 2018. The goal of the e-Manifest system is to transition away from the use of paper manifests and move to a fully electronic process for tracking hazardous waste shipments. Establishment of an electronic tracking system for hazardous waste shipments will allow tracking to be conducted in a more cost-effective manner, and result in reduced paperwork and processing burdens to the regulated community, as well as to the regulators. The e-Manifest system should also provide more timely access to manifest data and shipment information, and improve data quality shared among users, regulators, and their data management systems.

As a state with an authorized RCRA program under 40 CFR Part 271, Colorado is required to revise its state program in order to be equivalent to, consistent with, and no less stringent than the requirements of the federal e-Manifest User Fee rule.

Many of the regulatory provisions promulgated in the federal e-Manifest User Fee rule were issued under the authority of the e-Manifest Act, and can only be administered and enforced by the EPA. Colorado is required to adopt these provisions in order to maintain manifest program consistency.

Two sets of provisions in the federal that can only be administered by the EPA include the following:

1) Manifest printing specifications of § 262.21(f)(5), (6), and(7). These provisions describe the revised printing specification for the five-copy paper manifest and continuation sheet paper forms, the revised copy distribution requirements to be printed on each copy of the form, and the revised specification for printing the appropriate manifest instructions on the back of the form copies. These printing specifications apply to registered manifest printers and are administered solely by EPA, and

2) Fee methodology and related fee implementation provisions of subpart FF of 40 CFR Parts 264 & 265. The user fee provisions of subpart FF describe the methods and processes that EPA will use in setting fees to recover its program costs, and in administering and enforcing the user fee requirements. Although Colorado cannot receive authorization to administer or enforce EPA's e-Manifest system, Colorado is adopting the required state analog to 40 CFR § 264.71(j) and § 265.71(j) to reference the federal subpart FF provisions. This is necessary to ensure that members of the regulated community are on notice of their responsibilities to submit their final manifest copies to the system and to pay user fees to EPA for the processing of their manifests.

Additional provisions being adopted as part of this rulemaking include the following amendments:

Regulation	Subject
§ 260.4	Copy submission requirements for interstate shipments.
§ 260.5	Applicability of e-Manifest system and fees to facilities receiving state-only regulated wastes.
§ 262.20(a)(1) and (a)(2)	Removal of references to the Appendix to Part 262
§ 262.24(c)(1)	Use of mixed paper/electronic manifests.
§ 262.24(e)	Removal of references to the Appendix to Part 262
§ 262.24(g)	Removal of paragraph regarding imposition of user fees for electronic manifest use.
§ 262.24(h)	Generators and post-receipt data corrections.
Appendix to Part 262	Removal of the manifest form and instructions in the Appendix to Part 262
§ 263.20(a)(8)	Removal of paragraph regarding imposition of user fees for electronic manifest use for Transporters.
§ 263.20(a)(9)	Transporters and post-receipt data corrections.
§ 263.21(b)	En route changes to transporters
§ 264.71(a)(2)(v) and § 265.71.(a)(2)(v)	Receiving facilities' required paper manifest submissions to system.
§ 264.71(j) and § 265.71(j)	Imposition of user fees on receiving facilities for their manifest submissions.
§ 264.71(l) and § 265.71(l)	Receiving facilities and post-receipt data corrections.
§ 264.1086(c)(4)(i) and (d)(4)(i) and § 265.1087(c)(4)(i) and (d)(4)(i)	Removal of references to the Appendix to Part 262

This Basis and Purpose incorporates by reference the applicable portions of the preamble language for the EPA regulations as published in the Federal Register at 83 FR 420-462, January 3, 2018.

Statement of Basis and Purpose Rulemaking Hearing of February 19, 2019

8.93 Basis and Purpose

This amendment to 6 CCR 1007-3, Part 261, Appendix IX is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of Part 261, Appendix IX to Conditionally Delist F006 Hazardous Waste Generated by Acme Manufacturing located at 4650 S. Leydon St., Unit A in Denver, Colorado 80216.

Appendix IX of Part 261 is being amended to conditionally delist F006 hazardous waste generated at Acme Manufacturing in Denver, Colorado. This delisting will allow Acme Manufacturing to dispose of this waste at a solid waste landfill meeting the requirements of the Colorado Solid Waste Regulations (6 CCR 1007-2) or a metals recycling facility provided it complies with the conditions of the delisting. The Solid and Hazardous Waste Commission (the "Commission") is requiring an annual verification sampling of the delisted waste and the results of that verification sampling must be submitted to the Division within sixty (60) days of the sampling event for review against initial delisting criteria and sampling methodology.

Acme Manufacturing operates a manufacturing facility in Denver, Colorado for the production of steel threaded rods for use in the construction industry. Manufacturing processes at the facility include the zinc plating of steel parts, followed by either a clear or yellow chromate seal. Rinse water from these metal finishing operations is treated on-site in a wastewater treatment unit to remove heavy metals prior to discharging the treated wastewater to the publicly owned treatment works (POTW). The process of treating the wastewater generates wastewater treatment sludge. Pursuant to the listing description at § 261.31, wastewater treatment sludge generated from electroplating operations is classified as F006 hazardous waste.

The basis for the F006 hazardous waste listing is described in Appendix VII of Part 261 of the hazardous waste regulations. Each listing is based on hazardous constituents that are typically contained in the waste described by the listing. The hazardous constituents that formed the basis for the F006 listing include cadmium, hexavalent chromium (Chromium VI), nickel and complexed cyanide.

Samples of the wastewater treatment sludge generated at Acme Manufacturing were collected and submitted for analysis prior to submittal of the delisting petition. Four discrete samples of the wastewater treatment sludge were collected in accordance with a sampling and analysis plan that was reviewed and approved by the Hazardous Materials and Waste Management Division at the Colorado Department of Public Health and Environment. The waste samples were analyzed using the toxicity characteristic leaching procedure (TCLP) to determine the leachability of contaminants from the waste as well as total concentrations.

TCLP results of the wastewater treatment sludge indicate that the sludge does not exhibit any of the hazardous waste characteristics. Sample results confirmed that the sludge does not contain any organic toxicity characteristic constituents above detection levels. In addition, the sludge does not exhibit the toxicity characteristic for the eight heavy metals. The waste also does not exhibit the hazardous waste characteristic of corrosivity, ignitability or reactivity.

Zinc concentrations in the waste sludge was also analyzed using TCLP. The results of the analysis indicate that zinc was present at an average concentration of 195 mg/L, with the State of Colorado Regulation 41 Domestic Water Supply – Drinking Water Standard for zinc being 5 mg/L. At such levels, zinc may leach out of the waste at concentrations that would not be protective of human health and the environment under unrestricted use standards.

The sample results indicated that the level of zinc that may leach from the waste is too high for unconditional delisting of the waste. However, further evaluation of the physical and chemical nature of the waste indicate that the waste does not pose an unacceptable risk to human health and the environment if subject to certain conditions regarding handling and disposal at a Subtitle D landfill. Zinc present in the sludge at 195 mg/L is less than 100 times the State of Colorado Regulation 41 Domestic Water Supply – Drinking Water Standard of 500 mg/L (5 mg/L X 100). Based on the zinc being present at levels less than 100 times the State of Colorado Regulation 41 Domestic Water Supply – Drinking Water Standard, using Table A2-1 of Appendix 2 of the Hazardous Materials and Waste Management Division's May 2002 Corrective Action Guidance, Option II: Restricted Use, the sludge may be disposed of as a solid waste in a Subtitle D landfill.

Total analysis of the wastewater treatment sludge also indicated that the petitioned sludge contains a hazardous constituent, nickel, which is a basis for listing the waste as a F006 hazardous waste. Based on the chemical analysis of the waste samples, the average total concentration for nickel is 28.8 parts per million (ppm). The total average concentration of nickel is below the EPA Residential and Industrial Soil Screening Level.

Hazardous constituents detected in the waste samples which were not a basis for listing the waste as a F006 hazardous waste include barium, chromium (Total), copper, lead and zinc. The average total concentration for these constituents is: 13.2 ppm barium, 1,740 chromium (Total), 40.1 ppm copper, 6.1 ppm lead, and 78,325 ppm zinc. The average total concentration for these constituents is below the EPA Residential Soil Screening Level with the exception of zinc, which is present greater than the EPA Residential Soil Screening Level of 23,000 ppm. Zinc present in the sludge at 78,325 ppm is less than 100 times the EPA Residential Soil Screening Level of 2,300,000 ppm (23,000 ppm X 100). Based on the zinc being present at levels less than 100 times the EPA Residential Soil Screening Level, using Table A2-1 of Appendix 2 of the Hazardous Materials and Waste Management Division's May 2002 Corrective Action Guidance, Option II: Restricted Use, the sludge may be disposed as a solid waste in Subtitle D landfill.

This delisting is being granted under conditions specifying disposal, record keeping, storage and sampling requirements for the delisted sludge. Conditional delisting of the waste also prohibits any major changes to the metal finishing operations or wastewater treatment process without prior notification, evaluation, and approval by the Division.

The Colorado Solid and Hazardous Waste Commission, after a public hearing on February 19, 2019, voted to tentatively approve the petition to delist F006 hazardous waste generated by electroplating operations at the Acme Manufacturing Facility located at 4650 S. Leydon St., Unit A in Denver, Colorado 80216. The Commission's tentative decision is subject to public written comment until April 24, 2019. If no adverse comments are received, the tentative decision will become the final decision, and the delisting will become effective on May 30, 2019 without further notice. If the Commission receives adverse comments, the Commission will publish a timely withdrawal in the Colorado Register informing the public that the rule will not take effect.

This delisting does not apply to waste that demonstrates a "significant change" as defined in Delisting #010 in Part 261, Appendix IX—Wastes Excluded Under § 260.20 and 260.22(d), or if any of the conditions specified in Part 261, Appendix IX for this delisting are not met. Should either of these occur, the waste is and must be managed as a hazardous waste. While the Commission is approving this conditional delisting for this specific waste at this specific site, the findings and criteria associated with the approval are unique. Other petitions for delisting, even if similar in material or use, will be reviewed by the Division on a case-by-case basis.

Statement of Basis and Purpose Rulemaking Hearing of May 21, 2019

8.94 Basis and Purpose.

These amendments to 6 CCR 1007-3, Part 262 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Amendment of Part 262, Subpart L – Episodic Generation

These amendments revise the Part 262, Subpart L Episodic Generation requirements adopted by the Commission on May 15, 2018 in response to the federal Hazardous Waste Generator Improvements Rule issued by the Environmental Protection Agency (EPA) and published in the Federal Register on November 28, 2016 {81 FR 85732-85829}.

As discussed in the § 8.91 Statement of Basis and Purpose from the May 15, 2018 Hearing, Colorado chose not to adopt the new federal episodic generation event regulations, as the regulations were deemed to be unnecessarily complex, difficult to enforce, and would not afford any great relief to very small quantity generators (VSQGs) or small quantity generators (SQGs) experiencing an episodic hazardous waste generation event that causes them to exceed the generation quantity limit for their category in a particular month.

Instead, Colorado adopted more stringent Part 262, Subpart L regulations that required generators experiencing an episodic event to comply with the requirements of the generator category that applies during any given month. Colorado's regulations also allow VSQGs or SQGs who experience one episodic event during a calendar year that subjects them to LQG status to maintain their generator category and be exempt from the requirement to file a biennial report, as long as they comply with all of the other LQG requirements. As part of today's rulemaking, Colorado is also including additional requirements in § 262.232 of the regulations that a VSQG or SQG experiencing an episodic event must comply with in order to maintain their generator category and still be exempt from the biennial reporting requirements of § 262.41.

Episodic generation events have not been a problematic issue in Colorado. The Division requires generators to comply with the requirements for whatever generator category they are in any particular month. The Division has always advised that as a best management practice, generators who generate near the limit for a particular category comply with the more stringent requirements in order to ensure that if they generate in excess of the allowable limit, they will already be in compliance.

If a facility experiences an unusual episodic event, the Division has worked with these facilities to ensure that they quickly and easily comply with the required regulatory standards for that one-time event. This is accomplished through guidance documents which include contingency plan templates, training templates and additional material designed to help generators comply with more stringent requirements.

With these amendments, Colorado is making the following additions and clarifications to its Part 262, Subpart L provisions regarding Episodic Generation:

1) Addition of Section 262.231 (Definitions for this subpart). Definitions of "Episodic event", "Planned episodic event" and "Unplanned episodic event" are being added to the new section 262.231.

2) Addition of Section 262.232 (Conditions for a generator managing hazardous waste from an episodic event). The existing Subpart L provisions regarding episodic generation are being incorporated under § 262.232, and are being revised to include the following:

    a) Notification. The VSQG or SQG must notify the Department no later than thirty (30) calendar days prior to initiating a planned episodic event using EPA Form 8700-12. In the event of an unplanned episodic event, the VSQG or SQG must notify the Department within 72 hours of the unplanned event via phone, email, or fax, and subsequently submit EPA Form 8700-12.

    b) Labeling. The VSQG or SQG must label the containers and tanks accumulating episodic hazardous waste with the words "Episodic Hazardous Waste."

    c) Duration. The VSQG or SQG has up to sixty (60) calendar days from the start of the episodic event to manifest and send its hazardous waste generated from the episodic event to a designated facility.

    d) Recordkeeping. VSQGs and SQGs must maintain the following records for three (3) years from the end date of the episodic event:

        (i) Beginning and end dates of the episodic event;

(ii) A description of the episodic event;

(iii) A description of the types and quantities of hazardous wastes generated during the event;

(iv) A description of how the hazardous waste was managed as well as the name of the RCRA-designated facility that received the hazardous waste; and

(v) Name(s) of hazardous waste transporters.

e) A VSQG or an SQG that generates hazardous waste episodically at the level of an LQG more than once per calendar year must comply with all LQG requirements of Part 262 of these regulations, including § 262.41(Biennial reporting).

With these amendments, Colorado is clarifying the additional requirements that a VSQG or SQG experiencing an episodic event must comply with in order to retain their generator category, while still retaining Colorado's more stringent Subpart L provisions.

The Commission has evaluated the information presented at the rulemaking hearing, as well as the information in the Statement of Basis and Purpose. The Commission considers this information sufficient to justify adopting the more stringent rule. The Commission finds that this rule is necessary to protect public health and the environment.

Statement of Basis and Purpose Rulemaking Hearing of May 21, 2019

8.94 Basis and Purpose.

These amendments to 6 CCR 1007-3, Parts 260, 261 and 262 are made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-302(2), C.R.S.

Safe Management of Recalled Airbags

These amendments to Parts 260, 261 and 262 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) correspond to and provide equivalency with the Environmental Protection Agency (EPA) Safe Management of Recalled Airbags interim final rule published in the Federal Register on November 30, 2018 {83 FR 61552-61563}, and which also became effective on November 30, 2018.

The U.S. Department of Transportation (DOT) announced a national recall in May 2015 for airbag inflators manufactured by Takata due to a defect in their phase-stabilized ammonium nitrate (PSAN) propellant, which has resulted in fifteen deaths and at least 250 injuries in the U.S. as of August 2018. EPA issued the November 30, 2018 interim final rule in response to the urgent public health issue posed by recalled Takata airbag inflators still installed in vehicles. These airbag inflator recalls constitute the largest automotive recall in U.S. history, with 19 vehicle manufacturers affected and approximately 65-70 million airbag inflators scheduled to be recalled by December 2019. Of these affected airbag inflators, 50 million inflators in an estimated 37 million vehicles were recalled as of August 2018 and the remaining inflators will be recalled by December 2019.

The November 30, 2018 federal rule facilitates a more expedited removal of the defective Takata airbag inflators from vehicles by dealerships, salvage yards and other locations for safe and environmentally sound disposal by exempting the collection of airbag waste (airbag modules and airbag inflators) from hazardous waste requirements so long as certain conditions are met. This rule is intended to assist the automobile dealers and other entities in their handling of the airbags, and ensure delivery of the airbags to facilities that can more expertly manage these airbags in order to accelerate the recall.

These amendments to 6 CCR 1007-3, Parts 260, 261 and 262 provide a conditional exemption for airbag waste (i.e., airbag modules and airbag inflators) that exempt the collection of the airbag waste from hazardous waste requirements, so long as certain requirements are met. The amendments being adopted as part of this rulemaking include the following:

1) Section 260.10 (Definitions) of the Colorado Hazardous Waste Regulations is being amended to add definitions for "Airbag", "Airbag waste collection facility", and "Airbag waste handler".

2) Section 261.4 (Exclusions) is being amended by reserving paragraphs (h) and (i), and adding the requirements for the conditional exemption for airbag waste as paragraph (j). To qualify for the conditional exemption, airbag handlers and transporters are required to comply with the following requirements:

   A) The airbag waste is subject to an accumulation quantity limit of 250 airbag modules or airbag inflators, and an accumulation time limit 180 days;

   B) All airbag waste must be packaged in containers designed to address the risk posed by the airbag waste, and labeled: “Airbag Waste - Do Not Reuse";

   C) The airbag waste must be sent directly to either an airbag waste collection facility or to a designed TSD facility;

   D) The transport of the airbag waste must comply with all applicable U.S. Department of Transportation regulations in 49 CFR Parts 171 through 180; and

   E) The airbag waste handler must maintain records of all off-site shipments of airbag waste and all confirmations of receipt from the receiving facility for a period of 3 years.

3) Section 262.14 (Conditions for exemption for a very small quantity generator) is being revised to allow VSQGs to manage their airbag waste under the new conditional exemption. This amendment is to encourage automobile dealerships to send their airbag waste to an airbag collection facility rather than to a municipal solid waste landfill,

In accordance with § 261.4(j)(2), once the airbag waste arrives at an airbag waste collection facility or designated facility, the waste becomes subject to all applicable hazardous waste regulations, and the facility receiving the airbag waste is considered the hazardous waste generator and must comply with Part 262 of the regulations. Pursuant to the requirements of § 261.4(j)(3), reuse in vehicles of defective airbag modules or defective airbag inflators subject to a recall under the National Highway Traffic Safety Administration is considered sham recycling and prohibited under 6 CCR 1007-3, Part 261.2(g).

Because these amendments eliminate specific hazardous waste requirements that would otherwise apply to airbag waste (airbag modules and airbag inflators), these provisions are less stringent than existing regulations, and Colorado is not required to adopt them. However, the Division believes that adoption of these optional provisions will encourage and facilitate the expedited removal of dangerously defective Takata airbag inflators from vehicles and prevent the defective airbag inflators from being reused, while maintaining protection of human health and the environment during airbag waste collection, storage and disposal.

Statement of Basis and Purpose Rulemaking Hearing of May 21, 2019

8.94 Basis and Purpose.

This amendment to 6 CCR 1007-3, Part 6 is made pursuant to the authority granted to the Solid and Hazardous Waste Commission in § 25-15-314(1), C.R.S.

Amendment of § 6.04 Annual Commission Fee

Section 6.04 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3) is being amended at this time by revising paragraph (a) to reflect the annual Commission fee to be assessed for fiscal year 2019-2020. This rulemaking does not change the amounts of the annual Commission fees, but only changes the rules to reflect the 2019-2020 fiscal year.

Editor's Notes

6 CCR 1007-3 has been divided into smaller sections for ease of use. Versions prior to 4/30/2004 and rule history are located in the first section, 6 CCR 1007-3. Prior versions can be accessed from the All Versions list on the rule's current version page. To view versions effective after 4/30/2004, select the desired part of the rule, for example 6 CCR 1007-3 Part 260, or 6 CCR 1007-3 Part 8.

History

[For history of this section, see Editor's Notes in the first section, 6 CCR 1007-3]