DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Water Quality Control Commission

REGULATION NO. 22 - SITE LOCATION AND DESIGN APPROVAL REGULATIONS FOR DOMESTIC WASTEWATER TREATMENT WORKS

5 CCR 1002-22

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

22.1 SCOPE AND PURPOSE

- (1) These regulations are promulgated in implementation of the Colorado Water Quality Control Act (CWQCA) and, in particular, sections 25-8-202(1)(e) 25-8-202(1)(i), and 25-8-702 C.R.S., as amended and are designed to be in conformity with the CWQCA.
- (2) These regulations apply to construction of domestic wastewater treatment works, including wastewater treatment plants, individual sewage disposal systems, lift (pumping) stations, and certain interceptor sewers with a capacity of 2,000 gallons per day or greater, as well as certain facilities that produce reclaimed domestic wastewater.
- (3) Nothing in these regulations shall be construed to limit a local government's authority to impose landuse or zoning requirements or other limitations on the activities subject to these regulations.

22.2 DEFINITIONS

- (1) "AMENDMENT" means a change to an existing site location approval or a change to an existing domestic wastewater treatment works constructed before November 1967 and not expanded since that date, meeting the requirements of section 22.8, and for which reduced information requirements and a streamlined review process apply.
- (2) <u>"APPLICATION"</u> means the combined materials necessary to fulfill the requirements of section 22.4, 22.5, 22.6, 22.7 or 22.8 as appropriate. This may include the appropriate application form, engineering report, review agency recommendations and certifications.
- (3) "APPROVAL" means the final action of the Water Quality Control Division approving an application for site location approval, certification or design. A site location approval shall specify the location and, in general, the type of domestic wastewater treatment works being approved and its design capacity. This action may take the form of an approval, conditional approval, or acknowledgement of receiving certification (for interceptors).
- (4) "COMMISSION" means the Water Quality Control Commission created by section 25-8-201, C.R.S.

- (5) "CONSTRUCTION" means the erection or physical placement of materials, equipment, piping, earthwork, or buildings which are to be part of a domestic wastewater treatment works. Should an entity elect to build the improvements with in-house work forces, instead of contracted work forces, then construction shall be considered to begin when the entity initiates any action towards the erection or physical placement of materials, equipment, piping, earthwork, or buildings which are to be part of a domestic wastewater treatment works. When an entity enters into a contract for a non-traditional construction delivery approach, such as but not limited to design-build or construction manager at risk, the portion of the contract covering preparation of the site application and/or design, including obtaining Division review and approval of the site location and design, is not "construction" and initiation of such activities by the entity is in conformance with this regulation.
- (6) "COMPREHENSIVE PLAN" means the Master Plan adopted by a City, Town or County or an amendment to such plan. However, in the event that comprehensive plans overlap the subject property, then the plan developed by the local government having land use jurisdiction over the sight shall be given primary consideration.
- (7) "DESIGN CAPACITY" for the purpose of this regulation means the rated capacity (capability) of a proposed treatment plant at which it can meet the preliminary effluent limitations assigned by the Division as developed in accordance with subsection 22.4(1)(b)(iii) or, for an interceptor sewer or lift station, the peak hourly flow that the facility is capable of conveying. For a proposed treatment plant, the proposed design capacity is comprised of two components, the hydraulic capacity and the organic loading capacity. The hydraulic capacity shall be given in gallons per day (gpd) or million gallons per day (MGD) that the proposed treatment plant is able to treat. The organic loading capacity shall be given in pounds or tons of 5-day biochemical oxygen demand (BOD 5) per day that the treatment plant is able to treat. The proposed design capacity will generally be expressed as a maximum monthly average or another capacity measure where deemed appropriate by the Division. For facilities also considered in accordance with the Guidelines on Individual Sewage Disposal Systems, the proposed design capacity shall be the average daily flow, at full occupancy, prior to the application of the 150 percent design flow factor required by those Guidelines.
- (8) "DIVISION" means the Water Quality Control Division, Colorado Department of Public Health and Environment.
- (9) "DOMESTIC WASTEWATER" means a combination of liquid wastes (sewage) which may include chemicals, household wastes, human excreta, animal or vegetable matter in suspension or solution, or other solids in suspension or solution which are discharged from a dwelling, building or other structure.
- (10) "DOMESTIC WASTEWATER TREATMENT PLANT" (TREATMENT PLANT) means an arrangement of devices and structures for treating, neutralizing, stabilizing, or disposing of domestic wastewater, industrial wastes, and biosolids. A domestic wastewater treatment plant is one type (or element) of domestic wastewater treatment works. The term "domestic wastewater treatment plant" does not include industrial wastewater treatment plants or complexes whose primary function is the treatment of industrial wastes, notwithstanding the fact that human wastes generated incidentally to the industrial process are treated therein.

- (11) "DOMESTIC WASTEWATER TREATMENT WORKS" (TREATMENT WORKS) means a system or facility for treating, neutralizing, stabilizing, or disposing of domestic wastewater which system or facility has a designed capacity to receive two thousand gallons of domestic wastewater per day or more. The term "domestic wastewater treatment works" also includes appurtenances to such system or facility such as outfall sewers and pumping stations and to equipment related to such appurtenances. The term "domestic wastewater treatment works" does not include industrial wastewater treatment plants or complexes whose primary function is the treatment of industrial wastes, notwithstanding the fact that human wastes generated incidentally to the industrial process are treated therein.
- (12) <u>"EFFLUENT LIMITATION"</u> means any restriction or prohibition established under the "Colorado Discharge Permit System Regulations", Regulation 61 (5 CCR 1002-61).
- (13) "EXPANSION" means construction that increases the design capacity of a domestic wastewater treatment works. An expansion involves increasing the hydraulic capacity or the organic capacity of the domestic wastewater treatment works. In- kind replacement of facilities or equipment does not constitute an expansion. To be available for use by the owner, the capacity provided by an expansion must be authorized in a discharge permit amendment to revise existing discharge permit effluent limitations.
- (14) "GPD" (gallons per day) or "MGD" (million gallons per day) are the units used to estimate or measure total domestic wastewater flow to a domestic wastewater treatment works.
- (15) "IN-KIND REPLACEMENT" means replacement of any process treatment or hydraulic conveyance component at an existing domestic wastewater treatment works or lift station with an identical or similar (i.e., not exactly alike), component as part of normal or emergency maintenance to assure continued compliance with applicable permit conditions, including effluent limitations. Replacement or technology upgrades that do not change the original intent of the unit process being renovated and for which no increase in overall rated capacity is being requested qualify as in-kind replacement.
- (16) "INDIVIDUAL SEWAGE DISPOSAL SYSTEM (ISDS)" means an absorption system of any size or flow, or a system or facility for collecting, storing, treating, neutralizing, stabilizing, or disposing of sewage which is not part of or connected to a sewage treatment works. An ISDS with a design hydraulic capacity equal to or greater than two thousand gallons per day is considered to be a domestic wastewater treatment works and subject to this regulation.
- (17) "INTERCEPTOR SEWER" means a sewer line with an internal pipe diameter equal to or greater than 24 inches, if it performs one or more of the following functions as its primary purpose:
 - (a) It intercepts domestic wastewater from a final point in a collection system and conveys such waste directly to a treatment plant;
 - (b) It is intended to replace an existing treatment plant and transports the collected domestic wastewater to an adjoining collection system or interceptor sewer for treatment;
 - (c) It transports the domestic wastes from one or more municipal collection systems to a regional treatment plant;
 - (d) It is intended to intercept an existing major discharge of raw or inadequately treated wastewater for transport directly to another interceptor sewer or to a treatment plant. A sewer with a minor number of building or lateral connections may be considered an interceptor sewer if it performs one or more of the functions listed above. Interceptor sewers are appurtenances to domestic wastewater treatment works.

- (18) "LIFT STATION" (PUMPING STATION) means a wastewater pumping station that pumps the wastewater to a different point when the continuance of the sewer at reasonable slopes would involve excessive depths of bury or that pumps wastewater from areas too low to drain into available sewers. This definition does not include wastewater pumping stations for single family residences or clusters of five or fewer single family residences or other small buildings, as long as they receive less than two thousand gallons per day of domestic wastewater. Lift stations are appurtenances to domestic wastewater treatment works.
- (19) "MANAGEMENT AGENCY" means a municipality, appropriately designated by the governor, in accordance with section 208 of the Federal Clean Water Act and State Law, with responsibilities to implement all or part of an approved water quality management plan.
- (20) "MUNICIPALITY" means any regional commission, county, metropolitan district offering sanitation service, sanitation district, water and sanitation district, water conservancy district, metropolitan sewage disposal district, service authority, city and county, city, town, Indian tribe or authorized Indian tribal organization or any two or more of them which are acting jointly in connection with a domestic wastewater treatment works.
- (21) "OUTFALL SEWER" means a sewer that receives treated wastewater from a treatment plant and carries it to a point of final discharge. This definition does not include reclaimed domestic wastewater distribution and transmission system piping. Outfall sewers are appurtenances to domestic wastewater treatment works.
- (22) <u>"PERSON"</u> means an individual, corporation, partnership, association, state, or political subdivision thereof, federal agency, state agency, municipality, commission or interstate body.
- (23) <u>"208 PLANNING AGENCY"</u> means an entity appropriately designated by the Governor, in accordance with section 208 of The Federal Clean Water Act and State Law, to produce and update a water quality management plan.
- (24) "PRELIMINARY EFFLUENT LIMITATIONS (PELs)" means effluent limitations developed by the Division, or developed by the applicant and approved by the Division, that will serve as the effluent quality guidance for the alternative treatment facilities identified in the site location application and the selected alternative for the final design of the domestic wastewater treatment plant. PELs are determined for the proposed discharge flow and are set at a level such that the proposed treatment facility will not cause an exceedance of applicable water quality standards for those state waters to which the proposed discharge would be made
- (25) <u>"RECLAIMED DOMESTIC WASTEWATER"</u> means wastewater that has received treatment that enables the wastewater to meet the requirements, prohibitions, standards, and concentration limitations adopted by the Commission for subsequent reuses other than drinking.
- (26) "SITE" means the land or water area where any facility or activity subject to this regulation is physically located or conducted, including adjacent land used in connection with the facility or activity.
- (27) "STATE WATERS" means any and all surface and subsurface waters which are contained in or flow in or through this state, but does not include waters in sewage systems, waters in treatment works or disposal systems, waters in potable water distribution systems, and all water withdrawn for use until use and treatment have been completed.
- (28) "TREATMENT ENTITY" means a municipality or person responsible for treating the domestic wastewater.

- (29) "TREATMENT PROCESS MODIFICATION" means a physical construction change to an existing domestic wastewater treatment works that does not change the design capacity, but either replaces an existing treatment process with a different process or substantially alters the operating mode of the process.
- (30) "VAULT" means a watertight covered receptacle, which is designed to receive and store domestic wastewater either from a sewer or from a privy and is accessible for the periodic removal of its contents. If the vault is intended to serve a structure or structures that are projected to generate a domestic wastewater flow of two thousand gallons per day or more at full occupancy, the vault is a domestic wastewater treatment works. Vaults are Individual Sewage Disposal Systems.
- (31) "WATERCOURSE" means the natural or human-made channels or ditch or conveyance or standing body of water into which the effluent from a domestic wastewater treatment works is discharged and does not necessarily contain water at all times.
- (32) "WATER QUALITY MANAGEMENT PLAN" means a wastewater management and water quality plan produced in accordance with sections 208 and 303(e) of the federal Clean Water Act and state law, and certified and approved updates to that plan. A water quality management plan must identify a system of treatment plants necessary to meet the anticipated municipal and industrial waste treatment needs of the designated area over a 20-year period.

22.3 DECLARATION OF POLICY FOR THE SITE LOCATION APPROVAL PROCESS

- (1) Based on section 25-8-702(2) C.R.S., in evaluating the suitability of a proposed site location for a domestic wastewater treatment works, the Division shall:
 - (a) Consider the local long-range comprehensive plans for the area as they affect water quality and any approved water quality management plan for the area;
 - (b) Determine that the proposed domestic wastewater treatment works can be managed to minimize the potential adverse impact on water quality and in accordance with the preliminary effluent limits developed in accordance with subsection 22.4(1)(b)(iii); and
 - (c) Encourage the consolidation of wastewater treatment works whenever feasible with consideration for such issues as water conservation, water rights utilization, stream flow, water quality, or economics.
- (2) Each application for site location approval of a domestic wastewater treatment works shall be reviewed to ensure:
 - (a) That the existing treatment works will not be overloaded when connecting new lift stations or interceptors subject to site application requirements of sections 22.6 and 22.7;
 - (b) That the proposed treatment works is developed considering the local long-range comprehensive plans for the area as it affects water quality and the approved water quality management plans for the area;
 - (c) That the proposed treatment works can protect water supplies by meeting its discharge permit (where applicable) which is based on water quality standards and/or appropriate waste load allocation;
 - (d) That the proposed treatment works has been properly reviewed by all appropriate local, state, and federal government agencies and 208 planning agencies;

- (e) That the proposed treatment works can be operated and managed at the proposed site location to minimize foreseeable potential adverse impacts on the public health, welfare, and safety, as related to wastewater treatment and/or water quality;
- (f) That the applicant is capable of providing for adequate treatment works construction and operational management, including legal authority and financial capabilities, to meet its preliminary effluent limitations developed in accordance with subsection 22.4(1)(b)(iii), where applicable, and minimize potential adverse impacts on water quality on a long-term basis;
- (g) That the proposed treatment works be so located that it is not unnecessarily endangered by natural hazards; and
- (h) That the objectives of other water quality regulations will not be adversely affected.
- (3) In the interest of facilitating a more effective and timely review of individual applications, counties, other local governments and 208 planning agencies are encouraged to establish and implement a coordinated review and comment process.
- (4) In the interest of facilitating a more effective and timely review of proposed new and expanded domestic wastewater treatment works, each planning agency may establish and implement a coordinated review and comment process to carry out the provisions of this regulation in coordination with its water quality planning responsibilities. Where a 208 planning agency wishes to establish such a coordinated process, the Division may enter into an agreement with the 208 planning agency specifying the procedures for this coordinated process. The intent is to establish a single process 1) to meet these site location approval requirements and 2) to meet the requirements for amendments to the water quality management plan. The process should be designed so that a new or expanded domestic wastewater treatment works that which is approved as a part of the water quality management plan may be concurrently deemed to also meet the requirements of these site approval regulations at the time of its inclusion in the plan. Under such a coordinated process, the Division retains final authority for approval or denial of each project that is regulated under these site location approval regulations.
- (5) In-kind replacement of all or a portion of a domestic wastewater treatment works does not require site location approval unless the replacement occurs at a different location, in which case the treatment works are considered to be "New" and are subject to the requirements of section 22.4. Notification requirements for in-kind replacement are found at section 22.10. Similarly, changing the location of the discharge point on the previously approved site and within the same defined segment of the receiving surface water does not require site location approval. Other changes to discharge point locations involving new or re-located outfall sewers are subject to the requirements of section 22.4.
- (6) The Commission and Division (after review by the Commission) may adopt policies designed to aid in the interpretation and implementation of these regulations. The policies will be used in conjunction with the regulations to form the basis of Division actions with respect to applications for site location approval.
- (7) The burden is on the applicant to supply the information necessary for the Division to make an adequate review, based on the requirements in these regulations.

- (8) The Division will act expeditiously on all complete applications that have been submitted with a goal to complete its final review in a total of sixty days from the date of receipt of the application and applicable fee payment. The Division may require that the applicant ask for review and comments from other agencies for applications under sections 22.4, 22.5, 22.7 and 22.8; however, the Division will make the final decision regarding approval or disapproval of the application.
- (9) If the application is denied, the Division will specify which items were not satisfied by the application and what measures the applicant may take, if any, to satisfy those requirements.
- (10) Approval by the Division of an application for site location approval shall not be deemed to be a determination that the proposed treatment works are or are not necessary, that the proposed site is or is not the best or only site upon which to locate such a treatment works, or that location of a treatment works on the site is or is not a reasonable public use justifying condemnation of the site. Approval by the Division shall only be deemed to be a determination that the site application meets the requirements of this Regulation 22 (5 CCR 1002-22).
- (11) Approval of a site application by the Division or the Commission in no way negates the necessity for all applicants to obtain all required approvals from other state and local agencies.
- (12) All site location approvals become effective on the date of approval and will expire if construction has not started on the date specified by the Division in its approval letter or by the Commission, if the matter is appealed. Unless otherwise specified by the Division, the expiration date will be eighteen months from the date of approval. In setting the expiration date, the Division will consider the implementation plan and schedule (including design and bidding timing) provided with the application and any recommendation for phasing as contained in the water quality management plan. In the event of an appeal of the Division's action, the period during which construction is required to begin will be stayed pending the outcome of the appeal before the Water Quality Control Commission. If the Commission ruling upholds the Division's action, then the date of their ruling shall commence the approval period. Any project not commencing construction on or before the date of expiration must reapply or request a time extension. If there are no significant changes from the original application, an extension request can be accomplished by a letter request from the applicant.
- (13) Notice of the decision by the Division shall be included in the next Water Quality Information Bulletin.
- (14) Written notification of the Division's decision shall be sent to the applicant and all persons who have shown interest via written communication.
- (15) Any person adversely affected or aggrieved by the Division's decision on a site application must appeal that decision to the Commission as a prerequisite to the right of judicial review pursuant to the State Administrative Procedures Act. The appeal shall be made in writing to the office of the Administrator and be postmarked no later than thirty (30) days after the date of the mailing of the bulletin notice of the Division action. Within ninety (90) days of the filing of the appeal the Commission shall commence a hearing to consider such appeals in accordance with the provisions of section 24-4-105, C.R.S. If appeal is made to the Commission, the decision shall be made considering the criteria specified in these regulations.

22.4 APPLICATION PROCEDURES FOR CONSTRUCTION OF NEW DOMESTIC WASTEWATER TREATMENT WORKS

- (1) The application for site location approval of any proposed new domestic wastewater treatment works, except for interceptor sewers and lift stations as described below in sections 22.6 and 22.7, shall be made to the Division on the proper form. Prior to submitting the form to the Division, the application must be submitted to the local authorities and the 208 planning agency for review and comment in accordance with section 22.4(2). These application procedures also apply to proposals to move outfall sewers from the approved site location to another site. These application procedures also apply to proposals to construct new treatment facilities that will produce reclaimed domestic wastewater if those facilities are to be constructed at a site location that has not been previously approved by the Division or at a different site from the secondary treatment plant location.
 - (a) These forms shall be available from the Water Quality Control Division, 4300 Cherry Creek Drive South, Denver, Colorado 80246-1530 and on the Division's web page.
 - (b) Accompanying the application shall be an adequate engineering report describing the proposed new domestic wastewater treatment works and showing the applicant's capabilities to manage and operate the facility over the life of the project. The report shall be considered the culmination of the planning process. A full design report is not necessary for the application or to obtain approval. Design review procedures are described in section 22.11. The engineering report submitted with the application shall address and/or include the following at a minimum:
 - (i) Service area definition including existing and projected population, site location, staging or phasing, flow/loading projections, and relationship to other water and wastewater treatment plants in the area.
 - (ii) Proposed site location, evaluation of alternative sites, and evaluation of treatment alternatives. A less detailed evaluation of alternative sites and treatment alternatives may be submitted for domestic wastewater treatment works with a design capacity less than 50,000 gpd; however, the feasibility of consolidation must be considered in the report.
 - (iii) Preliminary Effluent Limitations (PELs) as developed in coordination with the Division.

The applicant may indicate in the engineering report that effluent limits for metals, organic parameters, and/or inorganic parameters, other than for total residual chlorine, will be met through implementation of a pretreatment program or other legally enforceable means of limiting discharges of these parameters to the wastewater collection system. The applicant may also provide documentation in the form of effluent data or an analysis predicting effluent quality to demonstrate that the limits will be met without specific source controls. Where the applicant indicates these parameters will be controlled by means other than treatment, after considering information provided by the applicant, the Division may condition the approval of the site location application to require a plan for control of the pollutants to be submitted with the permit application for the facility.

Where the Commission has adopted a temporary modification pursuant to section 31.7(3)(a)(iii) for the segment to receive the discharge for metals, organic parameters, or inorganic parameters other than for total residual chlorine, the preliminary effluent limits will be based on subsection 31.14(15)(b) of the Basic Standards and Methodologies for Surface Waters (Basic Standards). Where the temporary modification is adopted pursuant to subsection 31.7(3)(a)(i) of the Basic Standards, the preliminary effluent limit will be set consistent with the underlying standard.

Prior to submitting the application, the applicant is responsible to ensure that it has considered any impacts changes to water quality standards may have on the PELs in their application for site location approval and design for the proposed wastewater treatment works. Additionally, there are other factors that can impact the applicability of the PELs, such as changes in stream flows or ambient water quality. The Division may require that the PELs be re-evaluated when the Division is processing an application with PELs that, in the Division's judgment, may no longer be applicable. If it is determined that new PELs must be issued, Division action on the application will be delayed until new PELs are developed and it is verified that the proposed treatment process(es) will be able to meet any new PELs developed in accordance with this subsection.

- (iv) Analysis of the loading, capacity and performance of any relevant existing facilities within the applicant's service area(s).
- (v) Analysis of opportunities for consolidation of treatment works in accordance with the provisions of section 22.3(1)(c), including those recommended in the water quality management plan, unless the approved water quality management plan recommends no consolidation.
- (vi) Evidence that the proposed site and facility operations will not be adversely affected by floodplain or other natural hazards. Where such hazards are identified at the selected site, the report shall describe means of mitigating the hazard.
- (vii) Information used to evaluate geotechnical conditions at the proposed and alternative sites. This may include soil survey data from the Natural Resource Conservation Service (NRCS), available data from the Colorado Geological Survey, existing available data from on-site or adjacent geotechnical investigations, and other data and information the applicant deems to be representative of the expected geotechnical conditions. The preliminary geotechnical information must be sufficient for that person to make a determination that the site can reasonably be expected to support the proposed treatment works. Applicant may choose to submit a formal geotechnical report, including site-specific soil boring information and meeting the requirements of Section 22.4(1)(b)(viii), in support of the site application. The engineering report shall address the impact of expected geotechnical conditions at the proposed and alternative sites on design, construction, operation, and maintenance of the proposed facilities.

During the design phase, the Division may require that evidence be presented in the form of a report, containing soils testing results from the site of the proposed treatment works and design recommendations, prepared by a Professional Geologist, a Geotechnical Engineer, or by a professional meeting the qualifications of both Professional Geologist and Geotechnical Engineer, with an appropriate level of experience investigating geologic hazards, stating that the site will support the proposed facility. Where the applicant submits a formal geotechnical report with the site application, then the applicant has satisfied the geotechnical submittal requirements for the design review stage of the Division's approval process and resubmittal of the geotechnical report is not required.

- (viii) Detailed description of selected alternatives including legal description of the site of the proposed treatment works, treatment system description, design capacities, and operational staffing needs.
- (ix) Legal arrangements showing control of the site for the project life or showing the ability of the entity to acquire the site and use it for the project life.

- (x) Institutional arrangements such as contract and/or covenant terms which will be finalized to pay for acceptable waste treatment.
- (xi) Management capabilities for controlling the wastewater loadings within the capacity limitations of the proposed treatment works, i.e., user contracts, operating agreements, pretreatment requirements and/or the management capabilities to expand the facilities as needed (subject to the appropriate, future review and approval procedures).
- (xii) Financial system which has been developed to provide for necessary capital and continued operation, maintenance, and replacement through the life of the project. This would include, for example, anticipated annual budget and the fee and rate structure.
- (xiii) Implementation plan and schedule including estimated construction time and estimated start-up date.
- (xiv) Demonstration of the owner's capability to operate and maintain the facility, which shall include an emergency operations plan. The emergency operations plan shall outline procedures to minimize the possibility of sanitary sewer overflows and health hazards to the public and operations personnel. The emergency operations plan shall include information on, but not be limited to telemetry, backup power supply identification, portable emergency pumping equipment, emergency storage/overflow protection, and operator emergency response time.
- (c) Where the site application indicates that the proposed domestic wastewater treatment works will discharge treated effluent to a ditch or other manmade conveyance structure, or that an easement, right-of-way or other access onto or across private property of another person may be necessary to construct the facility or to effectuate the discharge, the applicant shall furnish to the Division evidence that a notice of the intent to construct a new domestic wastewater treatment works has been provided to the owner of such private property.
- (d) Where capacity in a domestic wastewater treatment works is shared between two or more entities, the entities must have entered into a capacity sharing agreement. The capacity sharing agreement must include terms that define that allocation of the treatment works amongst the parties and terms for initiating expansion of capacity. A draft of the agreement must be submitted with the site location application and a final approved version must be submitted with the design.
- (e) Where a domestic wastewater treatment works is proposed to provide service to a new or expanded service area, the owner of the proposed treatment works must demonstrate that this new or expanded service area is consistent with the water quality management plan.

- (2) The applicant shall be responsible for submitting the application and engineering report described in section 22.4(1)(b) for the proposed new domestic wastewater treatment works to all appropriate local governments, 208 planning agencies and State agencies for review and comment prior to submission to the Division. The applicant must perform all necessary coordination and supply all information for review by other agencies. The applicant is responsible for obtaining all necessary signatures on the form before sending it to the Division, unless the agencies fail to comment within 60 days, as discussed below. After receiving an application for site location approval, each agency shall have a period of sixty (60) days in which to review and comment on the application and to make a recommendation to the Division. After that sixty (60) day period, the applicant may submit the application to the Division without such comments and/or recommendations. Upon receipt of any application lacking the comments or recommendation of an appropriate review entity, the Division shall contact that agency and provide a period of seven (7) days for the agency to provide comments and/or a recommendation or to explain the absence of such comments and/or recommendation. The review and commenting agencies shall include the following:
 - (a) Management Agency, if different from other entities listed below:
 - (b) County if the proposed facility is located in the unincorporated area of a county. The county, through its commissioners or its designee, is requested to review and comment upon: the relationship of the treatment works to the local long-range comprehensive plan for the area as it affects water quality; the proposed site location alternatives including the location with respect to the flood plain; and the capacity to serve the planned purpose. A recommendation of approval from the county is considered to be a statement that the proposal is consistent with the water quality considerations contained in its local comprehensive plan.
 - (c) City or Town if the proposed facility is to be located within the boundaries of a city or town or within three miles of those boundaries if the facility is to be located in an unincorporated area of the county. The city or town, through its mayor, council or its designee, is requested to review and comment upon: the relationship of the treatment works to the local comprehensive plan and/or utility plan for the community as it affects water quality; the proposed site location alternatives including the location with respect to the flood plain; and the capacity to serve the planned development. A recommendation of approval from the city or town is considered to be a statement that the proposal is consistent with the water quality considerations contained in its local comprehensive plan.
 - (d) Local Health Authority, who is requested to review and comment on local issues, policies and/or regulations related to public health, safety and welfare as affected by the proposal;
 - (e) 208 Planning Agency, if designated or if such function has been delegated by the State, should comment on the consistency of the proposed treatment plant to the water quality management plan; and
 - (f) Other state or federal agencies shall be sent a copy of the application, if the proposed facility would be on or adjacent to any land owned or managed by such agency. The review and signature requirements given above do not apply to these agencies.
- (3) To notify the public, and provide additional opportunity for public input, the following posting requirements apply to all new treatment works, unless posted in accordance with local permitting requirements:

- (a) Signs are to be posted for 15 continuous days prior to the time the site application is submitted to the Division. However, the Division should be notified of the project at the time of posting so that necessary public information can be made available as required under (b) of this section. A photograph of the sign or other documentation certifying that this posting requirement has been met must be included in the application.
- (b) The sign shall be not less than 3' x 4' on a post not less than 4' above the natural grade where allowable, or else in conformance with applicable county or municipal sign codes. Notice shall contain the following information:

NOTICE OF PROPOSED FACILITY (IDENTIFY)

(Title must be 4" in red, or maximum allowable under sign code.)

Notice is hereby given that the property upon which this sign is posted shall be considered for the construction of a facility (identify). Additional information may be obtained by contacting the applicant (include applicant's phone number) or the Colorado Department of Public Health and Environment, Water Quality Control Division, (303) 692-3500.

22.5 APPLICATION PROCEDURES FOR INCREASING OR DECREASING THE DESIGN CAPACITY OF AN EXISTING DOMESTIC WASTEWATER TREATMENT WORKS WHERE CONSTRUCTION HAS TAKEN PLACE OR WILL TAKE PLACE

- (1) The application for site location approval for any increase or decrease in the design capacity of a domestic wastewater treatment works where construction has taken place or will take place, except for interceptor sewers and lift stations as described in sections 22.6 and 22.7 shall be made to the Division on the proper form. Prior to submitting the form to the Division, the application must be submitted to the local authorities and the 208 planning agency for review and comment in accordance with section 22.5(4). These forms shall be available from the Water Quality Control Division, 4300 Cherry Creek Drive South, Denver, Colorado, 80246-1530 and on the Division's web page.
- (2) The applicant shall also provide an adequate engineering report that documents the need for the increase or decrease in the design capacity, consistency with local wastewater facility plans and any approved water quality management plans, and, as a minimum, shall address the following:
 - (a) Changes to existing service area, population and loading projections;
 - (b) PELs, as developed in coordination with the Division consistent with subsection 22.4(1)(b)(iii), except that where a temporary modification is adopted pursuant to section 31.7(3)(a)(i) of the Basic Standards, the PEL will be consistent with subsection 31.14(15)(a) of the Basic Standards and the Division may defer the requirement to treat for the parameter to a compliance schedule to be included in the permit;
 - (c) Analysis of the loading, capacity and performance of the existing treatment works;
 - (d) Analysis of alternative means to treat the additional or reduced loading, in accordance with section 22.3(1), including any consolidation alternatives recommended in the approved water quality management plan except if the plan recommends no consolidation, that option does not need to be considered;
 - (e) Changes in the financial system which will result from the proposed increase or decrease in the design capacity, including changes to the fee structure;

- (f) Implementation plan and schedule, including the estimated construction time and the estimated date upon which the modified plant will be in operation.
- (3) Information used to evaluate geotechnical conditions at the proposed and alternative sites may include soil survey data from the Natural Resource Conservation Service (NRCS), available data from the Colorado Geological Survey, existing available data from on-site or adjacent geotechnical investigations, and other data and information the applicant deems to be representative of the expected geotechnical conditions. The preliminary geotechnical information must be sufficient to make a determination that the site can reasonably be expected to support the proposed treatment works. The applicant may submit a formal geotechnical report, including site-specific soil boring information that meets the requirements of Section 22.4(1)(b)(viii), in support of the site application. The engineering report shall address the impact of expected geotechnical conditions at the proposed and alternative sites on design, construction, operation, and maintenance of the proposed facilities.

During the design phase, the Division may require that evidence be presented in the form of a report, containing soils testing results from the site of the proposed treatment works and design recommendations. This report should be prepared by a Professional Geologist, a Geotechnical Engineer, or by a professional who meets the qualifications of both Professional Geologist and Geotechnical Engineer and who has an appropriate level of experience investigating geologic hazards, stating that the site will support the proposed facility. Where the applicant submits a formal geotechnical report with the application for site location approval, then the applicant has satisfied the geotechnical submittal requirements for the design review stage of the Division's approval process and resubmittal of the geotechnical report is not required.

(4) The applicant shall be responsible for submitting the application and engineering report described in section 22.5(2) for the increase or decrease in the design capacity of the domestic wastewater treatment works to all appropriate local governments, 208 planning agencies, and state agencies for review and comment prior to submission to the Division. The procedures for this comment and review process are specified in section 22.4(2).

22.6 CERTIFICATION PROCEDURES FOR ELIGIBLE INTERCEPTOR SEWERS

- (1) A new or expanding interceptor sewer may be eligible for certification in lieu of site location approval. The certification process is available in those circumstances where the treatment entity has adequate treatment capacity, or has site location approval for sufficient additional capacity to treat the projected total flow and the projected total flow would still be under their discharge permit flow limitations, where applicable, after the interceptor sewer is completed. Additionally, to be eligible for the certification process, the proposed interceptor sewer must be capable of carrying the projected flows from the applicable service area and the project must be consistent with the Water Quality Management Plan.
- (2) The certification process is as follows. Ninety days prior to the commencement of construction of an interceptor sewer, the person responsible for that sewer shall notify the 208 planning agency and the Division of such construction. This notification shall be accompanied by a certification from the treatment entity receiving the wastewater for treatment that it has, or will have, the capacity to treat the projected wastewater from that interceptor sewer in accordance with the treatment entity's site location approval and discharge permit. Within 30 days of receipt of notification, the 208 planning agency, or the Division if a 208 planning agency does not exist, shall certify that the proposed interceptor sewer has the capacity to carry the projected flow and is consistent with the Water Quality Management Plan. In the event the person responsible for an interceptor sewer does not have the said certifications from the treatment entity and the 208 planning agency, the person responsible shall be required to obtain site location approval from the Division, as set forth in section 22.7 of these regulations, prior to construction.

(3) For notification received pursuant to section 22.6(2), the Division shall acknowledge in writing, to the responsible person, the receipt of such notification and certification.

22.7 APPLICATION PROCEDURES FOR INTECEPTOR SEWERS NOT ELIGIBLE FOR CERTIFICATION AND LIFT STATIONS

- (1) The application for site location approval for interceptors not eligible for certification as provided for in section 22.6 and all lift stations (new or expanding) shall be made to the Division on the proper form. Prior to submitting the form to the Division, the application must be submitted to the local authorities and the 208 planning agency for review and comment in accordance with sections 22.7(2) and 22.7(3). These forms shall be available from the Water Quality Control Division, 4300 Cherry Creek Drive South, Denver, Colorado, 80246-1530 and on the Division's web page. The applicant shall also provide an adequate engineering report describing the proposed lift station and/or interceptor sewer. As a minimum, the report shall address the following:
 - (a) Name and address of the applicant;
 - (b) A map identifying the site of the proposed facilities, topography of the area, and neighboring land uses;
 - (c) Service area for the lift station, including existing and projected population, and flow/loading projections showing projected flow and loading over the following 20 years;
 - (d) Identification of the treatment entity responsible for receiving and treating the wastewater;
 - (e) Legal arrangements showing control of the site or right-of-way for the project life or showing the ability of the entity to acquire the site or right-of-way and use it for the project life;
 - (f) Confirmation, in writing, from the wastewater treatment entity that it:
 - (i) Will treat the wastewater;
 - (ii) Is not presently receiving wastes in excess of its design capacity as defined in its site location approval and/or discharge permit, or is under construction, or will be in a phased construction of new or expanded facilities, and will have the necessary capacity to treat the projected discharge from the new interceptor sewer or from the new or expanded lift station. Projections of flow and loading to the treatment plant over the period during which build out of the service area will occur or twenty years, whichever is less as well as current and future plant capacity information must be provided to demonstrate the plan for maintaining adequate treatment capacity. Any proposed treatment plant phased construction must be shown in the Water Quality Management Plan, or by appropriate planning and engineering studies;
 - (iii) Has not been in violation of any effluent limitations in its discharge permit for the last two years and is not operating under a Notice of Violation and/or Cease and Desist Order from the Division resulting from discharge permit violations. Alternatively, if there have been effluent violations or if the treatment plant is operating under a Notice of Violation and/or Cease and Desist Order from the Division, then the Division will evaluate the situation and the treatment entities' proposed corrective measures to achieve consistent compliance and determine if approval should be granted, granted with conditions, or denied;
 - (g) Evidence that the lift station and/or interceptor sewer will be properly operated and maintained:

- (h) Management capabilities for controlling the wastewater loadings within the capacity limitations of the proposed interceptor sewer or lift station, i.e., user contracts, operating agreements, pretreatment requirements and/or the management capabilities to expand the facilities as needed (subject to the appropriate, future review and approval procedures);
- (i) Financial system which has been developed to provide for necessary capital and continued operation, maintenance, and replacement through the life of the project. This would include, for example, anticipated annual budget and the fee and rate structure;
- (j) Demonstration of the owner's capability to operate and maintain the facility, which shall include an emergency operations plan. The emergency operations plan shall outline procedures to minimize the possibility of sanitary sewer overflows and health hazards to the public and operations personnel. The emergency operations plan shall include information on, but not be limited to telemetry, backup power supply identification, portable emergency pumping equipment, emergency storage/overflow protection, and operator emergency response time;
- (k) Implementation plan and schedule including estimated construction time and estimated startup date; and
- (I) To notify the public, and provide additional opportunity for public input, the posting requirements given in section 22.4(3) shall also apply to all new lift stations.
- (2) The application shall be forwarded to the city, town, or county in whose jurisdiction(s) the lift station and/or interceptor sewer is to be located for review and comment. The local authorities are requested to review and comment upon: the relationship of the lift station and/or interceptor to its local comprehensive plan and/or utility plan for the community as it affects water quality; the proposed site location alternatives including the location with respect to the flood plain; and the capacity to serve the planned purpose. A recommendation of approval from the local authority is considered to be a statement that the proposal is consistent with the water quality considerations contained in its local comprehensive plan. If the local authority does not review and comment on the application within 60 days, the applicant may submit the application to the Division without such comments and/or recommendations. Upon receipt of any application lacking the comments or recommendation of an appropriate review entity, the Division shall contact that agency and provide a period of seven (7) days for the agency to provide comments and/or a recommendation or to explain the absence of such comments and/or recommendation.
- (3) The application shall be forwarded to the 208 planning agency for the area in which the facilities are to be constructed and for the area to be served by those facilities for review and comment. A recommendation of approval from the appropriate 208 planning agency (agencies) is considered to be a statement that the proposal is consistent with any adopted water quality management plan(s). If the 208 planning agency does not review and comment on the application within 60 days, the applicant may submit the application to the Division without such comments and/or recommendations. Upon receipt of any application lacking the comments or recommendation of the 208 planning agency, the Division shall contact that agency and provide a period of seven (7) days for the agency to provide comments and/or a recommendation or to explain the absence of such comments and/or recommendation.
- (4) For all applications meeting the above criteria, the Division will adopt the recommendation of the 208 planning agency, assuming that the recommendation is consistent with that of the other review agencies, unless it is aware of potential adverse impacts from the project to water quality or the public health, safety or welfare not identified or addressed in the application. If the 208 planning agency does not provide a recommendation, or if the review agencies do not agree on the recommendation, then the Division will review and act on the application in accordance with section 22.9.

22.8 APPLICATION PROCEDURES FOR AMENDMENT OF EXISTING SITE LOCATION APPROVAL

(1) The application for amendment of an approved site application shall be made to the Division on the proper form with a list of the review authorities as defined in section 22.4(2) to whom the amendment proposal has been provided. These review agencies shall have 15 working days from receipt of the application to review and comment directly to the Division unless a brief (less than 15 working days) extension is requested in writing. The Division will not deem a lack of comments from such agencies within the specified comment period as a recommendation for denial during its consideration of the application. Where a significant increase in the hydraulic and/or organic capacity of a domestic wastewater treatment works is being requested based on one or more in-kind replacements of structures or equipment, the Division may require the owner to submit an application for a facility expansion in accordance with section 22.5 of this regulation. In such case, the applicant is not required to submit the information identified in subsections 22.5(2)(f) and 22.5(3).

These forms shall be available from the Water Quality Control Division, 4300 Cherry Creek Drive South, Denver, Colorado, 80246-1530 and on the Division's web page. The applicant is not required to provide copies to review authorities for the types of disinfection modifications as described in section 22.8(2)(b)(ii). The applicant, in consultation with the Division, should also evaluate whether a discharge permit amendment is necessary and file the appropriate application with the Division if it is needed.

- (2) An amendment to the site location approval shall be required for any one of the following changes from conditions reflected in an approved site application or from conditions at a domestic wastewater treatment plant constructed prior to November 1967 and not expanded since that date:
 - (a) The addition of a treatment process dealing with the liquid stream, that does not involve an expansion, i.e. an increase in design capacity;
 - (b) Physical changes to any of the following treatment processes:
 - (i) Any changes in type of disinfection to include chlorine gas or from other types of disinfection to chlorination. (A change from other types of disinfection to any form of chlorination requires that a PEL for residual chlorine be obtained and included in the application),
 - (ii) A change from gas chlorination to liquid chlorination or from any form of chlorination to ultraviolet light disinfection,
 - (iii) Changes to the secondary treatment system including aeration basins, recycle streams, or clarifiers,
 - (iv) Changes to the primary treatment system that could reduce primary treatment capacity and/or increase the flow, organic, or solids loadings to the secondary treatment process,
 - (v) Changes to aerobic or anaerobic digestion that would increase the recycle loadings to the plant above the approved design level or change the characteristics of the biosolids.
 - (vi) Addition of a new treatment process that could negatively affect effluent quality by increasing recycle flow to the plant or would directly have a negative impact on effluent quality.

- (vii) If a treatment entity is contemplating a physical change to its treatment works that is similar in scope to those listed above, but is not precisely covered by this list, then the entity must submit to the Division an analysis from a professional engineer registered to practice in the State of Colorado describing the proposed changes and describing how those changes would affect the performance of other parts of the treatment works, downstream treatment works, and effluent quality. This includes pilot projects and full-scale demonstration projects. Where such an analysis is submitted, the Division shall evaluate the proposed process change considering the list above and provide a written response to the entity either stating that the changes may be made without amending their previous site location approval and obtaining design approval, or requiring a site application amendment and subsequent design review. Such letter from the Division shall clearly specify that the changes executed must not be more extensive than those proposed in the engineer's analysis . For pilot projects and full-scale demonstration projects where it is determined by the Division that site location and design review are not required, the authorization for implementation of the pilot project or full-scale demonstration project at the identified treatment works shall be limited to a period of time to be determined by the Division, but not to exceed one (1) year with the option for the Division to extend the period up to one additional year. Where the owner desires to permanently utilize the pilot or demonstration project on a continuing basis, the owner is required to obtain site location and design approval prior to permanent utilization of the treatment technology or process.
- (c) A decrease or increase in the approved, rated design capacity of the treatment works, as long as no construction is to take place. An increase in hydraulic capacity for a treatment plant will require that the existing effluent limitations be analyzed in coordination with the Division to determine whether new PELs must be developed. Any changes in treatment requirements necessitated by more stringent PELs must be addressed by the proposed modification;
 - (i) The applicant shall also provide an adequate engineering report that documents the basis for increasing or decreasing the hydraulic and/or organic capacity and address consistency with local wastewater facility plans and any approved water quality management plans, and, at a minimum, shall address the following:
 - (A) Changes to existing service area, population and loading projections;
 - (B) PELs developed in accordance with section 22.4(1)(b)(iii); and
 - (C) Analysis of the loading, capacity and performance of the existing treatment works.
- (d) The addition of, or expansion of a treatment process to generate reclaimed domestic wastewater following secondary treatment at an existing treatment plant that has previously received site location and design approval. This amendment would also cover the change in type of discharge employed. A phased implementation of re-use may be included in the application and approved in accordance with section 22.3(12). Subsequent site approval amendments are not required as the phases are implemented within the approval period. Site approval amendments are not required for adding re-use sites in accordance with the Reclaimed Domestic Wastewater Regulation (5 CCR 1002-84);
- (e) The following changes in the type of discharge employed, where there is no change in the treatment process:

- (i) From a surface water discharge to a ground water discharge, or vice-versa, at the same approved site location, subject to appropriate PELs; or
- (ii) A partial or complete change from a surface water or ground water discharge to wastewater re-use subject to the requirements in the Reclaimed Domestic Wastewater Control Regulation (5 CCR 1002-84). Such amendment is only required for the first instance when re-use is implemented. A phased implementation of re-use may be included in the application and approved in accordance with section 22.3(12). Subsequent site approval amendments are not required as the phases are implemented within the approval period. Site approval amendments are not required for adding re-use sites in accordance with the Reclaimed Domestic Wastewater Regulation (5 CCR 1002-84).

22.9 FACTORS TO BE CONSIDERED FOR DIVISION OR COMMISSION DECISION MAKING

- (1) The Division shall review the site application and engineering report, and in making its determination as to whether or not to approve, conditionally approve or deny, shall consider a number of factors including:
 - (a) Designation of the legally responsible person and the legal description of the location;
 - (b) The existing domestic wastewater treatment facilities and feasibility (including the cost effectiveness, water quality management and local comprehensive plans, and legal, political and physical limitations) of treating wastes in an areawide facility;
 - (c) Relationship to and potential impact of proposed facility on any water supply intake;
 - (d) Location of proposed project relative to any flood plain or other natural hazard;
 - (e) Foreseeable potential adverse impacts on public health, welfare, and safety in accordance with section 22.3(2)(e);
 - (f) Proper public notice and any public comment;
 - (g) For treatment plants, the ability of the proposed treatment process(es) to meet the existing effluent limitations, the PELs developed in accordance with subsection 22.4(1)(b)(iii), whichever are applicable;
 - (h) Review and comment of all required local government agencies and all 208 planning agencies including recommendations for approval or disapproval and any conditions which should be a part of the Division approval;
 - (i) Long-range comprehensive planning for the area as it affects water quality;
 - (j) The water quality management plan for the area. The Division shall rely substantially upon such plan in deciding whether to grant site location approval where the plan is current and comprehensive with respect to its analysis of population growth and distribution as it relates to wastewater treatment. In those areas where water quality management planning has not been conducted, or where such planning is not current or comprehensive, the Division shall rely upon the factors (a) through (i) of this section and upon the information submitted in the application for site location approval as the primary determinants in making the site application decision. Where portions of a water quality management plan are adopted as regulation, pursuant to 25-8-105(3)(a), they shall be binding on the Division action; and

(k) The policies set forth in section 22.3.

22.10 IN-KIND REPLACEMENT

(1) The owner of a domestic wastewater treatment works (or its designee) that installs structures or equipment that meets the definition of in-kind replacement shall submit written notice of the nature and extent of such replacement to the Division no later than fifteen working days after the replacement work has been put into service. Division notification is not required for replacement with the same size and technology in the same location or for replacement of valves, non-wastewater lifting pumps, piping, pipe relining, yard structures, motors, splitter structures, manholes, vaults, samplers, monitoring equipment, support systems and similar facilities that do not affect the degree of treatment of the wastewater or biosolids being provided and for which no increase in capacity is being requested. The Division shall have fifteen working days to notify the owner if the work does not meet the definition of in-kind replacement and that an application for amendment of an approved site location is required. Unless waived by the Division, a new application for site location approval is required for replacement of equipment outside of the property approved under the latest site application.

22.11 THE DESIGN APPROVAL PROCESS

(1) In addition to approval of the site application or amendment, the applicant must obtain approval of the design of the treatment works from the Division prior to beginning construction. For domestic wastewater treatment plants, the design review is a two step process that includes submittal of a process design report (PDR) for review and approval by the Division followed by submittal of the final design documents (plans and specifications) for review and approval by the Division. For appurtenances such as outfall sewers and pumping stations, design review is a single-step process that involves a single submittal that includes an engineering report and final plans and specifications.

Notwithstanding the definition of domestic wastewater treatment works (treatment works) at subsection 22.2(11) of this regulation, once an owner has received site location approval, the owner may initiate work in preparation for construction, (e.g., site clearing, site dewatering and access roads) as long as such work is completed by the owner's own forces or is completed under a contract that does not include any elements of the construction of the treatment works including, but not limited to site excavation, construction of pipe galleries, and procurement or installation of equipment. Facilities generating reclaimed domestic wastewater are required to complete the design review process. The PDR and the final design documents must be stamped and signed by the applicant's professional engineer, registered to practice in the State of Colorado.

For a new, modified, or expanded domestic wastewater treatment plant, the applicant must either: follow the process outlined above or the applicant may notify the Division that it is seeking a streamlined design review and approval of the domestic wastewater treatment plant by the Division. For the streamlined design review approach, the applicant must submit the Process Design Report (PDR), stamped and signed by the applicant's professional engineer who must be registered to practice in the State of Colorado, a completed PDR checklist, any variance requests, and a letter of intent to self-certify the final design. The streamlined design review process includes review and approval of the PDR by the Division and the self certification of the final design documents by the applicant. At its discretion, where a variance is being sought, the Division may require the applicant to complete the full design approval process. When the final design documents (plans and specifications) are complete, the professional engineer for the applicant that prepared such plans shall submit a stamped, dated, and signed certification on a form provided by the Division affirming that the final design is consistent with the approved site application, the PDR, and the most recent published version of CDPHE Policy 96-1, noting any approved variances from the Policy. The proposed project cannot move forward into the construction stage without site location approval by the Division, approval of the PDR, and

Division acceptance of the self-certification request letter. The streamlined design review process is not available to an applicant proposing to include a new technology not covered by the State's design criteria policies and guidance or to projects where the conditions of receipt of funding require that the final design documents be reviewed and approved by the Division.

If the Division discovers discrepancies between the facilities as described in the PDR and those finally constructed, the applicant will either agree to make modifications to resolve the inconsistency to the Division's satisfaction or the approval of the design will be null and void.

In some cases the design of the domestic wastewater treatment works can impact the cost and funding of the preferred option specified in the application for site location approval. In such cases the applicant is encouraged to consult with the Division regarding the specific circumstance and identify critical design issues in the site application to avoid obtaining site location approval for an option that will not be able to obtain design approval.

- (2) The applicant's professional engineer, registered to practice in the State of Colorado, must certify at the completion of construction that the treatment works was constructed according to plans, specifications and significant amendments thereto as approved by the Division. Significant amendments are considered those that change the treatment process, the capacity of the treatment works or the ability to operate the treatment works.
- (3) Design reviews shall be conducted by the Division in accordance with policies established by the Division and the Commission.
- (4) Approval of a facility design by the Division or the Commission in no way negates the necessity for all applicants to obtain all required approvals from other state and local agencies.
- (5) Notice of the decision by the Division shall be included in the next Water Quality Information Bulletin.
- (6) Written notification of the Division's decision shall be sent to the applicant and all persons who have shown interest via written communication.
- (7) Any person adversely affected or aggrieved by the Division's decision on a proposed facility design must appeal that decision to the Commission as a prerequisite to the right of judicial review pursuant to the State Administrative Procedures Act. The appeal shall be made in writing to the office of the Administrator and be postmarked no later than thirty (30) days after the date of the mailing of the bulletin notice of the Division action. Within ninety (90) days of the filing of the appeal the Commission shall commence a hearing to consider such appeals in accordance with the provisions of section 24-4-105, C.R.S. If an appeal is made to the Commission, the decision shall be made in accordance with the criteria specified in these regulations.

22.12 - 15 RESERVED

22.16 Statement of Basis and Purpose

A written statement of the basis and purpose of these regulations and the amendments adopted by the Commission on November 18, 1981 has been prepared and adopted by the Commission. The written statements are hereby incorporated in these regulations by reference in accordance with 24-4-103, C.R.S., as amended.

22.17 Statement of Basis and Purpose for the Amendments to the Regulations Entitled "Regulations for Site Applications for Domestic Wastewater Treatment Works Adopted: November 17, 1981 The subject regulations are for the implementation of the Colorado Water Quality Control Act, C.R.S., 25-8-101, et seq. Section 25-8-702 (1)(a) specifically requires the Water Quality Control Division to approve the site location of any domestic wastewater treatment works with designed capacity greater than 2,000 gallons per day prior to the commencement of the construction or expansion of the treatment works.

The regulations are intended to advise applicants for site approvals of the proper procedures for obtaining the site approvals and as to the minimum information necessary for the Division to determine if a site application should be approved.

Section 25-8-702 (2) specifically states: "In evaluating the suitability of a proposed site location for a domestic wastewater treatment works, the Division shall: (a) Consider the local long-range comprehensive plan for the area as it affects water quality and any approved regional water quality management plan for the area; (b) Determine that the plant on the proposed site will be managed to minimize the potential adverse impacts on water quality and; (c) Encourage the consolidation of wastewater treatment facilities whenever feasible". These factors are contained in the regulations and information necessary to evaluate those considerations are required by the regulations.

The only scientific and technological issues involved in these regulations are the preliminary design data, comprehensive planning, and facility management considerations which must be submitted to the Division so it may evaluate the site application against the statutory mandate. However, these regulations do not specify the details of such requirements since each application must be evaluated on its own terms. Therefore, further explanation here is unnecessary.

The site application forms will require submittal of technical data which allow the Division staff to evaluate such things as service area and population, treatment capabilities and alternatives, flood plain information, financial capabilities, and legal and institutional arrangements. Also, in regard to comprehensive planning, the forms will require information as to the relation of the proposed facility to existing and regional facilities and require that appropriate local governments and planning agencies have an opportunity to review the proposed project. An explanation of the costs of compliance with these regulations is discussed in the fiscal impact statement.

In considering the economic reasonableness of its action in adopting these regulations the Commission considered the cost of compliance with the expected benefits of maintaining existing uses of State waters. It found the costs of compliance to be an insignificant part of the overall scheme for protecting the State's waters. In addition, much of the cost of compliance with these regulations was considered by the General Assembly in adopting the site approval requirement and would be incurred in the planning process and in obtaining a State discharge permit.

22.18 Fiscal Statement Regarding Amendments to the Regulations Entitled Adopted: November 17, 1981

"Regulations for Site Application for Domestic Wastewater Treatment Works"

Private and municipal applicants for approval of sites for the location of wastewater treatment works shall directly bear the cost of the rule and it is presumed that their cost will become a component of subsequent wastewater treatment fees imposed on persons or entities ultimately using the proposed treatment works. Such costs are those incurred by the site applicants for preparation of engineering studies and reports. The specific dollar amount will be a function of the complexity and size of the proposed wastewater treatment plant. The beneficiaries of this rule are those persons or entities utilizing the waters of the State into which the discharge from the proposed site would flow. The positive fiscal impact of this rule on beneficiaries will be from preservation of existing uses of the waters of the State from which users receive economic gain and other benefits.

Although there will be additional costs involved in the compliance with the requirements of this regulation, there was no specific economic data submitted to the Commission through the public hearing process and no testimony was given that the regulations themselves would cause an adverse economic burden. Furthermore such costs would be incurred as a part of the planning and permit processes.

22.19 Statement of Basis, Specific Statutory Authority, and Purpose; 1996 Amendments

The provisions of 24-4-103(4), 25-8-202(1)(e), (I), and (2) and 25-8-702, C.R.S., provide the specific statutory authority for consideration of the regulatory amendments proposed by this Notice. The Commission also adopted, in compliance with 24-4-103(4), C.R.S., the following statement of basis and purpose.

Basis and Purpose:

A. Overview

The existing requirements which are being addressed in this proceeding have been in place since their original adoption in 1981. During this time, the Commission has become aware of minor deficiencies with these requirements. The changes adopted in this proceeding will further clarify already existing requirements for applicants as well as easing time constraints on all parties affected by appeal proceedings.

B. Title

The title of the regulations has been shortened to make it less cumbersome and to reflect the process to which it applies.

C. Vault

A definition of a vault has been incorporated as 22.2 to clarify the status of this type of Individual Sewage Disposal System (ISDS) with respect to this process. Vaults are recognized as a form of ISDS through 25-10-105(1)(h) and, as provided by Paragraph II.A, of the Guidelines On Individual Sewage Disposal Systems, required to obtain site approval when design flows exceed 2,000 gallons per day.

D. Consolidation

The required elements of the engineering report have been modified to include an analysis of opportunities for consolidation of treatment works together with other treatment alternatives at 2.2.4(3)(c)(iv). This should serve to reduce site application review times by providing information on feasibility necessary to comply with 25-8-702(2)(c).

E. Effective Date

The status of an approval which is under appeal to the Commission has been clarified by modifying 2.2.5(4). In at least two instances, applicants have questioned whether the approval date was the date of the Division action or the date of the Commission action. To clarify this confusion, the Commission has defined the date of its ruling on an appeal as the effective date of the approval.

F. Notice

The means of providing public notice of site application actions has been changed to reflect the correct title of the Commission's bulletin.

G. Appeals

The present requirements provided only a sixty (60) day time frame within which to commence a hearing. This has created scheduling problems for the Commission and placed an undue hardship on all parties in adequately preparing for a hearing on such short notice. The Commission has, therefore, amended 2.2.5(7) of the regulation to allow up to ninety (90) days from receipt of an appeal to the commencement of a hearing.

22.20 Statement of Basis, Specific Statutory Authority and Purpose; July, 1997 Rulemaking

The provisions of sections 25-8-202 and 25-8-401, C.R.S., provide the specific statutory authority for adoption of the attached regulatory amendments. The Commission also adopted, in compliance with section 24-4-103(4) C.R.S., the following statement of basis and purpose.

Basis and Purpose

The Commission has adopted a revised numbering system for this regulation, as a part of an overall renumbering of all Water Quality Control Commission rules and regulations. The goals of the renumbering are: (1) to achieve a more logical organization and numbering of the regulations, with a system that provides flexibility for future modifications, and (2) to make the Commission's internal numbering system and that of the Colorado Code of Regulations (CCR) consistent. The CCR references for the regulations will also be revised as a result of this hearing.

22.21 Statement of Basis, Specific Statutory Authority and Purpose; January, 1998 Rulemaking

The provisions of sections 25-8-202 and 25-8-401, C.R.S., provide the specific statutory authority for adoption of the attached regulatory amendments. The Commission also adopted, in compliance with section 24-4-103(4) C.R.S., the following statement of basis and purpose.

Basis and Purpose

Introduction: These revisions to the Regulations for the Site Approval Process 22 (5 CCR 1002-12) were initiated by an informational hearing in September, 1995. At that hearing, the Commission heard from several parties regarding improvements that could be made in the rules and, based on that input, decided to make several minor improvements without further public input. However, the Commission also realized that there were more substantive issues that would be best addressed by receiving more thorough input, and subsequently assigned the task of proposing major rule revisions to an advisory committee. The Water Quality Control Division was given the responsibility of preparing the list of minor changes as well as organizing the review team that would grapple with the larger issues.

Both processes were set in motion in late 1995, and the set of minor amendments was adopted by the Commission in May of 1996. The critical review team was organized in December, 1995, and was comprised of representation from consulting engineers, local government, regional planning agencies, wastewater treatment agencies, and the real estate development industry. The changes to the rule adopted in this action were the result of the work of the review team during 1996 and 1997. The following is a description of the rationale behind each of the changes.

Definitions, (22.2): Significant changes to the definitions included:

- Application was added to the definitions to avoid confusion as to what constituted an appropriate set of information from which to reach a decision.
- Approval was added to clarify that the Division's final action could take several forms.
- Design Capacity was modified to indicate that the means of expressing capacity is an important feature that must be provided consistently.

- Domestic Wastewater was modified to clarify that it does not mean process wastewater. This modification does not alter the terms usage and is consistent with the definitions of domestic wastewater treatment plant and domestic wastewater treatment works.
- Interceptor Sewer was modified to clarify that a small number of taps does not automatically nullify the concept of a large receiving sewer, and that sewers less than 24 inches in diameter are not significant conveyances requiring site approval, except in unusual circumstances.
- -Population Equivalent, Throughput, and Transporting Entity were deleted since they were no longer used in these regulations.
- Process Wastewater was added only to clarify the regulation. Its definition is the same as that contained in the Commission's Colorado Discharge Permit System Regulations, Regulation 61 (5 CCR 1002-61)
- Vault was modified by deleting the words watertight, covered to remove a perceived loophole in the regulation. It was determined that this is not inconsistent with the ISDS regulation, but that the Division would review the ISDS regulation to determine if it also should be modified.
- Water Quality Management Plan was added to clarify that not all plans are oriented towards managing water quality, a point of some confusion in the past.

Declaration of Policy (22.3): Much of the previous language in the section which sets forth Commission policy for issuing site approval was taken directly from the statute (25-8-702, C.R.S.). To avoid redundancy and provide focus, only those three statutory policies expressly requiring certain considerations were repeated. The previous regulation also included a list of other policy considerations that were largely left intact, but included several important modifications. Interceptor was deleted from each policy where it appeared since they are not part of a treatment works. Also, the statutory reference to design and construction of expansions, after certain capacity thresholds were reached, was deleted as redundant. Finally, a new policy, 22.3(6), which set forth conditions and procedures for a planning agency to enter into a coordinated review process with the Division, was included. This new policy addressed one of the main concerns with the previous rule in that plan amendment requirements were seen as duplicative of site approval requirements where viable area wide water quality management plans were in existence. This new policy will allow a coordinated and efficient review at both the regional and state level. A few minor changes to the list of policies, including a new, easy-to-read format, were also made.

Application Procedures - New (22.4): Another significant concern with the previous regulation was that it did not recognize the difference in complexity between application for an entirely new site as opposed to an expansion at an existing approved site. The changes made in this action recognize those differences by streamlining application procedures for expansions in a separate section. The prior rule also included application procedures for interceptors and lift stations under one set of requirements. Since these processes could be much more streamlined, they, too, were addressed in a separate section.

Section 22.4 now deals only with application procedures for new wastewater treatment plant sites. A number of minor wording changes help clarify the revised section, but several significant changes were also necessary. The requirement for an analysis of opportunities for consolidation has always been a subject of controversy, but the changes to 22.4(1)(b)(iv) should help by linking that analysis to a water quality management plan, thus avoiding redundancy. The flood plain analysis requirement was also clarified (22.4(1)(b)(vi)), and a new requirement to include soils and geologic hazard evaluation, prepared by qualified professionals, should help to assure that suitable plant sites are selected (22.4(1)(b)(vii)). The requirement of legal arrangements showing control of the site for the project life was expanded to include the ability of the entity to acquire the site and use it for the project life. It was clarified that any approval based on this was not to be used as a justification in a condemnation proceeding (22.4(1)(b)(ix)).

The review and sign-off procedures in 22.4(2) were extensively revised to make the process more efficient. Among the more significant changes was the inclusion of a requirement that the Division solicit comments from any review agency who has not submitted comments on an application. This requirement will help assure that nearly all applications have the full review of appropriate agencies. More definition of the scope of the review requested from municipalities and local health authorities was also included.

The requirement that the State Geologist review each application was deleted from the list of review agencies. This action was taken largely because of the inclusion of more extensive geologic information now required as part of the engineering report (see 22.4(1)(b)(iv)), including the requirement that the information be developed by a professional geologist and a geotechnical engineer, or a professional who meets the qualifications of both geologist and geotechnical engineer. This review was also considered a costly evaluation which produced little in the way of added value. A new provision was added allowing the Division to require that an applicant ask for review and comment from other agencies, including the State Geologist regarding potential geologic hazards, if it feels such review is needed (22.8(2)).

Application Procedures - Expansions (22.5): Since expansions at existing approved sites do not have to meet the same threshold tests as new sites in the areas of site suitability, financing, institutional and management considerations, the application and review requirement should be streamlined accordingly. This has been addressed by adding a new section specifically for expansions. Section 2.2.5 includes less complex application requirements and a somewhat abbreviated review process. These changes were made in response to review committee input that stresses the importance of a discharger's treatment track record as the most important consideration when an application to expand was pending. The typical questions of site suitability and long term ability to treat wastes asked of new applicants were largely moot in the case of expansions. A provision allowing the Division to require a geologic report, as in section 22.5, was included. Section 22.8(2), which allows the Division to require that an applicant ask for review and comment from other agencies, is also applicable to section 22.5.

Application Procedures - Lift Stations/Interceptors (22.6): In the previous regulations, application requirements for all types of facilities were merged into one section. This has created some confusion and unnecessary work, particularly for new interceptor sewers and lift stations. Section 22.6 alleviates this confusion by separating out the application, certification, and review procedures for interceptors and lift stations. The certification procedures for interceptors is largely unchanged, but is now less confusing since it is dealt with in a separate section (22.6(1)). The application procedures for ineligible interceptors and all lift stations is streamlined and clarified in 22.6(2), and the approval process is much improved by requiring only statements of consistency with appropriate plans as the heart of the review. Division oversight of that determination of consistency is correspondingly minimized.

Application Procedures - Amendments (22.7): Experience with the site approval process has revealed that occasionally it is necessary to amend approved applications. These changes are often the result of new effluent requirements brought about because of revised stream standards or other regulatory changes. Occasionally, it is simply a matter of upgrading a facility with new technology without expanding the capacity (expansions require site approval via 22.5). An informal amendment process has been in place since that need was recognized, but this process is now formalized with the inclusion of 22.7. That section sets forth the circumstances when an amendment is necessary, the minimal information requirements in the application, and the streamlined review process.

Criteria for Decision Making - (22.8): Most of the criteria guiding Division and Commission decision-making was retained from the existing regulation. However, some modification to the criteria dealing with consolidation opportunities was made for clarification purposes, and a new criteria was added to emphasize the important role that current and comprehensive area wide water quality management plans play in reaching a site approval decision.

Parties to the Rulemaking Hearing

1. Denver Regional Council of Governments

- 2. Metro Wastewater Reclamation District
- 3. Aspcol Corporation, N.V., Douglas and Barbara Scheffer, and Puma Paw Ranch, Inc.
- 4. The City of Colorado Springs
- 5. North Front Range Water Quality Planning Association
- 6. Pike Peak Area Council of Governments

22.22 Statement of Basis, Specific Statutory Authority and Purpose; April 2004 Rulemaking

The provisions of sections 25-8-202 and 25-8-401, C.R.S., provide the specific statutory authority for adoption of the attached regulatory amendments. The Commission also adopted, in compliance with section 24-4-103(4) C.R.S., the following statement of basis and purpose.

Basis and Purpose

Introduction: The changes adopted to this regulation by the Commission largely implement the recommendations developed by a Division-led stakeholder group that was formed after the informational hearing held by the Commission in March 2003.

There were numerous minor changes made to improve clarity and address inconsistencies in the previous regulation. Substantive changes are summarized and discussed below. In addition to the regulatory changes, the Division and stakeholders agreed that a guidance document must be developed to inform the regulated community about the Division's review and approval process. The guidance document will include a further description of the Division's review process including flow charts and timelines. The guidance document will also include detailed instructions for completing an application, target deadlines for the Division to issue PELs and process applications, and reporting mechanisms for the Division to assess achievement of these target deadlines. Improving the predictability and timeliness of the review process is an expected outcome of implementing the guidance document. The guidance document will be issued by the Division no later than September 30, 2004.

Title: The title of the regulation was changed to add design approval so that the regulations will fully encompass the site location and design approval processes that are specified in 25-8-702 C.R.S.

Definitions, (22.2): Significant changes to the definitions included:

- * "Amendment" was added to the definitions to help clarify when the process defined in section 22.8 is applicable.
- * "Approval" was modified to include the interceptor certification and design approval process and to require that approvals provide specific information with regard to the treatment works being approved.
- * "Construction" was modified to allow design-build contracts to be executed for domestic wastewater treatment works projects. The definition in 25-8-701 is repeated; however, a sentence was also added to exclude the portion of such a design-build contract, that covers the site application and design work, from being considered to be "construction." Usually, in these circumstances, the Division has worked with the entity to approve portions of the design in a stepwise fashion, approving each portion of the design before actual construction activities of that portion of the treatment works commence. The Commission finds this to be an acceptable practice. The Commission still intends that no actual erection or physical placement of materials, equipment, piping, earthwork, or buildings which are to be part of a domestic wastewater treatment works may be commenced unless the full site application and at least that portion of the design to be constructed has been approved by the Division.

- * "Comprehensive Plan" was added to distinguish this plan from the 208 Water Quality Management Plan and other local government plans and address the situation when comprehensive plans overlap the subject property. Since cities, towns and counties can formally adopt comprehensive plans or master plans for areas that extend beyond their legal boundaries, it is possible that the site for a wastewater treatment facility will be addressed in more than one comprehensive plan. The revised definition allows the Division to consider each of these overlapping plans and gives direction when these plans are in conflict. There are instances in Colorado where local governments have addressed overlapping planning areas through Intergovernmental Agreements. The Division should be made aware of such agreements by the local governments in their review so that the site application can be found consistent with the plan(s) as addressed in the agreement.
- * "Design Capacity" was modified to be more specific and allow for the possibility that a parameter other than flow or biochemical oxygen demand may limit design capacity. Additionally, the design capacity for Individual Sewage Disposal Systems (ISDS) that are subject to the site location approval process was defined.
- * "Domestic Wastewater Treatment Works" was modified to conform with the definition provided in 25-8-103 C.R.S., except that the revised definition includes facilities with a design capacity equal to two thousand gallons per day. The definition in the Water Quality Control Act includes facilities that receive more than two thousand gallons per day. The Guidelines on Individual Sewage Disposal Systems adopted by the Board of Health cover systems with design capacities of less than two thousand gallons per day. Thus, a facility with a design capacity of exactly two thousand gallons per day could potentially be excluded from regulation altogether. The Commission finds that including such systems in this regulation is appropriate.
- * "Effluent Limitation" was added. The definition references Colorado Discharge Permit Regulations, 5 CCR 1002-61.
- * "GPD" (gallons per day) or "MGD" (million gallons per day) was modified so as not to conflict with the definition of design capacity.
- * "Individual Sewage Disposal System (ISDS)" was added for clarification. Furthermore, an ISDS with a design capacity equal to or greater than two thousand gallons per day is considered to be a domestic wastewater treatment works.
- * "Interceptor Sewer" was modified to more clearly list the actual functions of an interceptor sewer that make it subject to the regulations.
- * "Lift Station" was clarified because any lift station receiving less than two thousand gallons per day would not be subject to this regulation, not just lift stations associated with small clusters of single-family residences.
- * "208 Planning Agency" was added to clarify that this is specifically one of the agencies established in the Water Quality Control Act with authority to comment during the site application process. Previously this was defined only as "Planning Agency" which created confusion. Thus, in numerous places throughout the regulation, "Planning Agency" was changed to "208 Planning Agency."
- * "Outfall Sewer," a type of domestic wastewater treatment works, was modified to exclude reclaimed domestic wastewater distribution and transmission system piping because it is not appropriate to require site location and design approval for these piping systems, as the reuse does not result in a discharge to state waters.
- * "Preliminary Effluent Limitations (PELs)" was added because this term is used in the regulation and PELs are required to be submitted as part of an application.

- * "Reclaimed Domestic Wastewater" was added because the site application procedures applicable to domestic wastewater treatment works for reclaimed domestic wastewater were clarified in the regulation. The definition is consistent with 25-8-103 C.R.S.
- * "Site" was added. The definition is consistent with the Colorado Discharge Permit Regulations, 5 CCR 1002-61.
- * "Treatment Process Modification" was added because the site application procedures applicable for such modifications were clarified in section 22.8.
- * "Vault" was modified to clarify that if the building(s) it serves will generate more than two thousand gallons per day of domestic wastewater, then the vault is a domestic wastewater treatment works.

Declaration of Policy, (Section 22.3): The title of this section was changed because this Policy Declaration is applicable for the overall site location approval process, not just to construction or expansion situations.

Section 22.3(2)(e) was changed to be more specific and focus on water quality impacts. Section 22.3(2)(f) was modified to allow the Division to consider the applicant's capability, including legal authority and financial capability, to adequately construct the treatment works rather than just their operational management capability after the facility is constructed.

Sections 22.3(3) and 22.3(4) of the previous regulation were moved to the newly-created section 22.10 which addresses the design review process. Sections 22.3(5) and 22.3(6) were added to the Declaration of Policy for clarification. Section 22.3(7) was moved from section 22.4(5) of the previous regulation because it is a more general policy statement applicable to the entire site location approval process and not just the site location approval process for new treatment works, which is the topic of section 22.4.

Sections 22.3(8), (9), (12), (13), (14) and (15) were moved from section 22.8 of the previous regulation because they are general policy type statements and are not factors in decision-making (which is the substance of the previous section 22.8). Section 22.3(10) was created by moving the text from section 22.4(1)(b)(ix) of the previous regulation because the concepts expressed therein apply to the overall site location approval process and not just the legal control of the site aspect covered in section 22.4(1)(b)(ix). This same text was repeated in section 22.6(2)(e) of the previous regulation and has been deleted from that location. The approval period provided in section 22.3(12) is now more flexible and can be extended past one year, if merited, and shown as necessary in the schedule provided with the application. The first sentence in section 22.3(15) was also modified to improve clarity. The last sentence of section 22.3(15), regarding the need for applicants to obtain all required approvals from other state and local agencies, was moved from the previous text to create section 22.3(11) because that concept applies to the overall site location approval process and not just the appeals process that is covered in section 22.3(15).

Application Procedures - New (Section 22.4): The title of this section was changed because it applies to more types of domestic wastewater treatment works than only treatment plants, and this is further clarified by the changes to section 22.4(1). The site application procedures in section 22.4 also apply to outfall sewers moving from the approved site to another location and new facilities being constructed to produce reclaimed domestic wastewater at a site location not previously approved by the Division or at a different site from the secondary treatment plant. It is now clarified in section 22.4(1)(b) that a full design report is not needed to support the site application. Also, a detailed evaluation of alternative treatment sites and treatment techniques will not be required for small systems. This change is being made to lessen the burden of the site application process on small systems based on stakeholder feedback. However, small systems must consider the feasibility of consolidation. A discussion of the applicability and the possible need to confirm or change PELs during the site application process has been added to section 22.4(1)(b)(iii) to make applicants aware of these considerations.

A sentence was added to the end of sections 22.4(2)(b) and (c) to clarify the meaning of a recommendation for approval from local agencies. Section 22.4(3) of the previous regulation was moved to section 22.4(2) as subsection (f) because this completes the listing of other agencies involved in the process and includes all of them within section 22.4(2). The text in section 22.4(2)(f) was also modified slightly to be more consistent with the other elements in section 22.4.

Section 22.4(4) of the previous regulation was moved to the beginning of section 22.4(2) because it is a better fit with that portion of the regulation covering coordination and signatures from other agencies. Section 22.4(5) in the previous regulation was moved to section 22.3(7), as discussed above, because it is more consistent with a policy statement. Minor clarifications were added to the posting requirements in section 22.4(3) and it is now clear as to how meeting the posting requirement can be met and how this can be demonstrated in the application.

Application Procedures - Expansions (Section 22.5): The title of this section was changed because it applies to more types of domestic wastewater treatment works than only treatment plants, and this is further clarified by the changes to section 22.5(1). Additionally, inclusion of facility modifications in this section was not appropriate. Treatment process modifications are now covered explicitly in section 22.8(2)(b). Section 22.5(4) was modified so that the comment and review process for an expansion is equivalent to that in section 22.4(2).

Certification Procedures - Eligible Interceptors (Section 22.6): This section was added to more clearly segregate the two possible site location approval mechanisms for interceptors: certification (described in section 22.6) or application (described in section 22.7). Certification is the simpler of the two processes but is not possible in all circumstances. Section 22.6(1) provides the circumstances when an interceptor sewer is eligible for certification. Sections 22.6(2) and (3) discuss the certification process and the Division's response in these situations. The text in section 22.6(2) was also modified to more closely parallel the provisions in 25-8-702(3) C.R.S.

Application Procedures - Interceptors Not Eligible for Certification and Lift Stations (Section 22.7): The title of this section was changed to clarify that the requirements therein apply to interceptor sewers that cannot be certified as provided for in the newly-created section 22.6 and to all lift stations. Changes were made to sections 22.7(1)(c) and (f)(ii) to allow a more complete analysis of the overall flow and loading projections associated with lift stations and of the accepting treatment plant to ensure that the treatment plant has or will have adequate capacity over time. It is acceptable for the treatment plant to rely on expansion or phased construction, provided that such is presented in the Water Quality Management Plan, or appropriate planning and engineering studies. Section 22.7(1)(f)(iii) has been modified to provide appropriate means for reviewing proposed lift stations in these circumstances. Section 22.7(1)(i) was added to require posting as required in section 22.4(3). Leaving this requirement out of this section was an oversight when this section was created during the last update to the regulation.

Clarifications to the local agency review process were incorporated into sections 22.7(2) and 22.7(3). Additionally, the same path forward provided in section 22.4(2) for new or expanding treatment works specifying how applicants can proceed when the local authorities or the 208 planning agency do not review an application within 60 days has been added to sections 22.7(2) and 22.7(3). This was done because site applications for lift stations and interceptor sewers not eligible for certification should not be subject to local agency review requirements that are different from site applications for new or expanding treatment works. A sentence was also added to the end of section 22.7(4) to allow the Division to act on a site application that is not reviewed by the 208 planning agency. Additional text was added clarifying that the Division will review and act on an application in accordance with section 22.9 in the event that the review agencies do not agree on the recommendation to approve or disapprove the site location approval application.

Application Procedures - Amendments (Section 22.8): Experience with the site location approval process has shown the applicability and efficiency of the relatively simple amendment process to be beneficial. Changes were undertaken in this section to clarify the amendment process for reviewing agencies and to more fully develop the circumstances when a proposed treatment process modification requires that the previous site location approval be amended. Modifications were also made to section 22.8(1) to allow for certain types of changes in disinfection process, specified in section 22.8(2)(b)(ii), to proceed without review agency comment. The application form for these types of amendments will be simplified as compared to the standard amendment form. The Commission determined that this is an appropriate simplification of the amendment process since these changes would not significantly alter the approved site or pose any additional off-site concerns. However, the ability for such agencies to appeal the amendment approval would remain the same as the current regulation. Section 22.8(2)(b) provides a list of physical treatment process changes that the amendment process will apply to and a process for resolving other similar changes. The Commission contemplates, for amendments described in section 22.8(2)(b)(ii), that the application form can be submitted concurrently with the design documents and that the Division will act on both submittals simultaneously. Changes to the secondary treatment system that would require an amendment under section 22.8(2)(b)(iii) are limited to physical changes that significantly alter how the facility accomplishes secondary treatment, e.g., changing from lagoon treatment to activated sludge treatment, adding clarifiers and sludge re-circulation to Rotating Biological Contactors to improve ammonia removal, etc. Treatment process modifications that do not involve construction of facilities, e.g., changing chemical flocculants, would not require site location approval (or amending the existing approval). Section 22.8(2)(c) was modified to cover capacity rating changes more explicitly and to highlight the need to consider any potential impacts to effluent limitations. Section 22.8(2)(d) was added to allow the addition or expansion of domestic wastewater treatment works generating reclaimed domestic wastewater at the same site as the secondary treatment plant (provided that the plant has prior site location and design approval) to proceed via the relatively simple amendment process.

The modifications to Section 22.8(2)(e) clarify when amending a site application would apply to a change in the type of discharge employed. Section 22.8(2)(e) of the previous regulation concerning changes in discharge location has been deleted. This section was deleted because changing the discharge location within the same receiving water segment and within the same site does not require site location approval or amending a previous site location approval. However, changing the discharge point to another site, even within the same receiving water segment would involve constructing new domestic wastewater treatment works, specifically the outfall sewer, at a new site. This activity is subject to the requirements of section 22.4.

Decision Making - (Section 22.9): The title of this section was changed because specific, i.e. numeric, criteria for decision-making are not provided. The Commission agreed with the stakeholders and the Division that developing specific criteria is not warranted because circumstances associated with constructing new or expanding treatment works or amending a site location approval vary widely. Thus, developing specific criteria would jeopardize the flexibility currently exercised by the Division to work through site location issues with applicants while still protecting public health and water quality. Section 22.9(1)(e) was changed to be consistent with the policy in section 22.3(2)(e) as discussed above. Section 22.9(1)(f) was changed to clearly show that the Division will consider public comment, as this has always been the case. Section 22.9(2)(g) was added because the ability of a proposed treatment plant to meet the preliminary effluent limits is one of the key factors that the Division has always considered when reviewing a site application. The rest of section 22.8 after subsection (1) was moved to section 22.3 because these elements are more consistent with policy statements.

Design Approval - (Section 22.10): This section was added so that the regulation would fully encompass the statutory provisions of 25-8-702 C.R.S that require approval for the design of domestic wastewater treatment works as well as the site location. General requirements, policy statements and procedures were added. The Commission decided that further detailed, specific regulatory elements were not needed, again because the Commission did not wish to limit the Division's flexibility to resolve design issues with applicants, while still protecting public health and water quality.

Reserved - (22.11 to 22.15): These sections are reserved for potential future use.

Parties to the Rulemaking Hearing

- 1. Air Park Metropolitan District
- 2. Parker Water and Sanitation District
- 3. Colorado Wastewater Utility Council
- 4. Denver Regional Council of Governments

22.23 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE (JULY 13, 2009 RULEMAKING, EFFECTIVE SEPTEMBER 30, 2009)

The provisions of sections 25-8-202 and 25-8-401, C.R.S., provide the specific statutory authority for adoption of these regulatory amendments. The Commission also adopted, in compliance with section 24-4-103(4) C.R.S., the following statement of basis and purpose.

BASIS AND PURPOSE

Definitions, (22.2): Significant changes to the definitions include:

"Construction" - The Commission modified the definition of construction to address the situation where the owner uses in-house work forces, instead of contracted work forces, to construct a domestic wastewater treatment works. In this situation, the Commission found it appropriate to establish the time that construction begins as the point where any activity described in the previous definition of construction is initiated. This is appropriate in order to ensure that the regulation is applied under both circumstances. The Commission recognizes that this would allow an entity to purchase equipment without having obtained site application approval which the owner would be doing at its own risk with the possibility that the Division would not approve the site application and/or design based on the use of such equipment. The Commission also broadened the last sentence to include the many forms of alternative construction delivery approaches that are frequently all lumped into the term "design-build."

"Design Capacity" - The Commission clarified the definition of design capacity to indicate that the proposed treatment process must be capable of reducing the concentrations of pollutants in the wastewater to a level that will meet the preliminary effluent limits developed in accordance with subsection 22.4(1)(b)(iii), rather than "effluent limits." This is necessary to avoid confusion as to which effluent limits the proposed facility must be able to meet, particularly where there is an existing permit with limits based on different circumstances than those on which the preliminary effluent limits for the proposed facility are based. The Commission also deleted the provision that design capacity could be based on the capability of the proposed facility to treat another pollutant such as ammonia. The Commission found that this provision could have applied to organic and inorganic pollutants other than ammonia and that the depth of analysis required to ensure that the capacity is based on the most limiting pollutant would be overwhelming. The Commission understands that the Division will ensure that the proposed facility is able to treat the expected loading of pollutants such as ammonia during the design review process.

<u>"Expansion"</u> - The Commission simplified the definition of expansion and modified the provision regarding in-kind replacement given that a definition of "in-kind replacement" has been added to the regulation. The Commission clarified the definition of expansion to specify that an expansion must be addressed in a discharge permit amendment in order to revise existing discharge permit effluent limitations.

"In-Kind Replacement" - The Commission added a definition of "in-kind replacement" based on recommendations by stakeholders who were concerned that replacement of a piece of equipment (e.g., an aerator) with a similar piece of equipment with a slightly higher rating was being required to obtain site approval by the Division. The Commission recognizes that replacement of equipment or a structure is not an exact science due to the fact that exact models may no longer be available or that construction methods may have changed such that use of current common practice would result in a slightly different structure being built. The Commission intends the use of the term "similar" in the definition to provide flexibility for the owner of a domestic wastewater treatment works to replace older equipment with modern versions that may be more efficient or to have one of several units at a higher rated capacity to provide a "factor of safety." The Commission intends to allow replacement or technology upgrades to qualify as in-kind replacement as long as the original intent of the unit process being renovated is not changed (e.g., replacing a bar screen with a fine screen). The Commission expects that in-kind replacement will generally be limited to situations where equipment/structure failure occurs or where the expected design life has been reached and removing the equipment /structure is prudent to ensure continued compliance. The Commission does not intend for replacement "inkind" of several critical pieces of equipment or structures to be used as a means of achieving a significant increase in the DWWTW capacity that could then be realized through the amendment process under section 22.8. Under these circumstances, the entity should be required to seek such increase(s) through the facility expansion process at section 22.5. The Commission understands that interpretation of these situations will require judgment and expects the Division and facility owners to work together to find common sense solutions under these circumstances.

" <u>Preliminary Effluent Limitations (PELs)"</u> - The Commission revised the definition of preliminary effluent limitations (PELs) to clarify that they are to be used to guide the treatment needs for the alternatives to be considered for evaluation as well as for the selected alternative that is proposed in the site application. The Commission also deleted the reference to PELs being developed in support of a permit application to clarify that PELs are used in the site application process.

<u>"Vault"</u> - The Commission revised the definition of "vault" to make it more consistent with the definition in the Individual Sewage Disposal System Guidelines.

The Commission revised the provisions of subsection 22.3(1)(b) to delete the reference to a discharge permit as it is the preliminary effluent limits developed in accordance with subsection 22.4(1)(b)(iii) that set the appropriate effluent quality requirements for the site application planning process.

The Commission revised the provisions of subsection 22.3(1)(c) to allow consolidation to be determined infeasible based on any one of the identified criteria. Given that the statute requires the Division to "encourage" consolidation, the Commission found it appropriate to make this change since a consolidated project should arguably have advantages over separate projects in all of these areas. This change is not intended to diminish the consideration the Division must give to a 208 plan that specifies a consolidated facility.

The Commission revised the provisions of subsection 22.3(8) to add a goal for the Division to complete review of site applications in a total of sixty days. The Commission finds it is appropriate to state a general expectation for the review of site applications given that the facilities for which approval is being requested are critical to the protection of public health and environment as well as to the financial well-being of the applicant. The Commission recognizes that not all applications are complete upon initial submittal to the Division and that the sixty day goal does not include time during which the applicant is developing responses to Division comments.

The Commission increased the default period before an approved site application expires in subsection 22.3(12) to eighteen months based on the Division's experience that completing the design, Division review of the design and obtaining other approvals/easements can take up to eighteen months.

The Commission revised the provisions of section 22.4(1)(b)(iii) to clarify that the applicant can indicate that it intends to meet preliminary effluent limits for metals, organic parameters, and inorganic parameters, other than for total residual chlorine, by controlling sources to the collection system through a pretreatment program rather than through planned domestic wastewater treatment. The Commission found this to be appropriate since, where concentrations of these parameters would exceed the preliminary effluent limit, domestic wastewater treatment entities usually meet such limits through control of sources rather than installing treatment to remove them. The Commission also provided the option for the applicant to indicate that limits for these parameters can be met with no specific controls on sources to the collection system.

The Commission included in subsection 22.4(1)(b)(iii) a provision to clarify, where a temporary modification for a parameter has been adopted pursuant to subsection 31.7(3)(a)(iii) of the Basic Standards and Methodologies for Surface Waters (Basic Standards) for metals, organic parameters and/or inorganic parameters, other than for total residual chlorine, that preliminary effluent limits for existing or proposed discharges will be set based on the provisions of subsection 31.14(15)(a) of the Basic Standards. The Commission required PELs for new facilities proposing to discharge to segments where a temporary modification has been adopted pursuant to subsection 31.7(3)(a)(i) of the Basic Standards to be based on the underlying standard.

The Commission also modified subsection 22.5(2)(b) to reference the provisions at subsection 22.4(1)(b)(iii) with an exception, where a temporary modification has been adopted pursuant to subsection 31.7(3)(a)(i), that the Division may defer the requirement to treat for the parameter to a compliance schedule to be included in the permit. The Commission adopted this provision with the understanding that the Division will use this option in limited circumstances such as where the treatment necessary meet a PEL based on the underlying standard would require technology such as reverse osmosis.

The Commission revised the provisions of subsection 22.4(1)(b)(vii) to delete the requirement for a site specific geotechnical investigation and report for the site of the alternative and proposed treatment works during the site location approval application phase of the project. In making a determination as to the suitability of the proposed site to support the proposed facility, the applicant may use existing geotechnical data and information that is considered to be representative of anticipated site conditions in lieu of a site-specific geotechnical investigation and report. At the applicant's option, a site-specific geotechnical investigation and report may be accomplished and submitted in support of the site location approval application.

The Commission found the requirement for a site-specific subsurface soil and/or geological and geotechnical investigation to be overly burdensome to applicants at the planning phase. Some communities do not have the financial resources at the site location application stage of the project to support what may be a design phase level of evaluation and investigation. Funding from sources such as the Revolving Loan Fund and/or Department of Local Affairs has not necessarily been completed at the site location application phase of the project.

The Division may require a site-specific geotechnical investigation in the design phase of the project to be submitted at the time of review of the process design report. If the applicant submits a site-specific geotechnical investigation report with the site location approval application, such a site-specific geotechnical report will not be required with the process design report. Similar changes were made to subsection 22.5(3).

The Commission added new section 22.4(1)(b)(xiv) to include the requirement to develop an emergency operations plan to demonstrate that a new domestic wastewater treatment works owner has a level of emergency operations capability. Policy 96-1, *Design Criteria Considered in the Review of Wastewater Treatment Facilities*, provides expectations for facilities such as emergency power or emergency wastewater storage where an equipment or power failure could cause discharge of partially treated or raw wastewater.

The Commission added new subsection 22.4(1)(d) to clarify the minimum information necessary to ensure shared capacity in a treatment facility. This information was previously included in guidance only. This requirement is not intended to limit the expansion of a facility service area in the future.

The Commission added new subsection 22.4(1)(e) to clarify that service areas must be consistent with those described in the water quality management plan. The Commission made mandatory this aspect of consideration of the water quality management plan in the Division's decision making process as it is critical, for planning and facility sizing purposes, to have confidence in the service area designation and that information is best taken from the water quality management plan.

The Commission revised section 22.5 to address requests for decreases in design capacity for instances where construction has taken place or will take place. Prior to this revision, the language in section 22.5 was specific to expansions (increases in the approved design capacity) although section 22.5 was the only means for the Division to evaluate and process requests for a reduction in the approved design capacity for a wastewater treatment works where construction was or would be involved. The revisions to the language remedy this issue and will help to clarify the requirements associated with a request for a reduction in the design capacity of a wastewater treatment works,

The Commission added new subsection 22.7(1)(j) to section 22.7(1) to include the requirement to develop an emergency operations plan to demonstrate that a new domestic wastewater treatment works owner has a level of emergency operations capability. Policy 96-1, *Design Criteria Considered in the Review of Wastewater Treatment Facilities*, provides expectations for facilities such as emergency power, portable pumping, or emergency wastewater storage where an equipment or power failure could cause discharge of partially treated or raw wastewater.

The Commission revised the provisions of section 22.8(1) to provide the Division authority to require an application for treatment plant expansion in cases where a significant increase in capacity is being requested based on one or more in-kind replacements. The Commission, in the new definition of in-kind replacement, has provided significant flexibility to treatment plant owners to replace structures and equipment with larger units. Where a significant increase in capacity has resulted from such replacement(s), the Commission finds it appropriate that the site application go through the full local review process consistent with the requirements for a facility expansion. However, since this request for capacity increase would be based on already-constructed facilities, the Commission exempted the applicant from submitting the implementation plan and schedule and geotechnical information otherwise required under subsections 22.5(2)(f) and 22.5(3), respectively.

The Commission revised the provisions of newly designated subsection 22.8(2)(b)(vii) to include pilot projects and full scale demonstration projects (e.g., odor control at a lift station). This is appropriate in order to allow testing to confirm the expected performance of technology to be conducted under the amendment process that has a quicker agency coordination and review process. The Commission limited the period of authorization for pilot/demonstration projects to one year or as determined by the Division after which time continuing use of the facilities will require approval of a site application and design documents.

The Commission added a new section 22.10 in conjunction with the new definition of in-kind replacement to require Division notification of certain in-kind replacements and to clarify that these replacements must be limited to the previously approved site unless the Division waives the requirement for a new site application. The Commission finds this to be appropriate in order give the Division the opportunity to confirm the replacement meets the requirements of in-kind and to keep the Division appraised of changes to the DWWTW. This will allow the Division to respond to inquiries from third parties and to be familiar with the current configuration of the treatment works in the event that an amendment is sought. The Commission emphasizes the intent of this provision is to allow replacement of equipment in an emergency or as part of normal operation and maintenance. If there is any doubt on the part of the owner that the replacement may not meet the definition of "in-kind", the Commission strongly encourages the owner to contact the Division in advance to confirm that the replacement will not be determined to be outside of the definition requiring an after the fact site application approval. The Commission exempted

several types of replacement from the requirement to notify the Division, including replacement with the same piece of equipment or structure as well as other types of replacement that would not necessarily affect the operational capability or capacity of the treatment works. This will limit the types of notification to those that have the potential to affect the capacity of the treatment works or its capability to operate in a manner necessary to meet its intended performance requirements. The Commission clarified that revisions to the regulation are intended to apply prospectively only; therefore, in-kind replacements occurring before the effective date of the revised regulation are not subject to the notification requirements in section 22.10.

The Commission revised the provisions of subsection 22.11(1) to

- (1) Add detail defining the elements of the design review process;
- (2) Provide an exclusion from the definition of construction after site location approval has been obtained to allow initial site preparation work such as access roads to the site, site clearing, and dewatering of the site prior to approval of the design. The Commission finds it appropriate to allow these activities to be initiated prior to approval of the design in order to provide a project proponent flexibility to conduct this work while design documents are being finalized. The Commission limited this option to work that would not be specifically related to the proposed design in order to prevent construction of aspects of the design such as site excavation, installation of pipe galleries, etc. as it is appropriate for these elements of the project to be constructed after approval of the design has been obtained; and
- (3) Add an option for a streamlined design review process for domestic wastewater treatment plants. This process requires Division review and approval of the process design report (PDR) that includes the calculations and other technical information to justify the proposed treatment units and represents a level of design of approximately 60%. The option for streamlined review will provide an applicant with the flexibility to save time within its overall project schedule by self-certifying the final design rather than submitting the full set of drawings and specifications to the Division for review. The streamlined procedure will allow Division staff to focus on the pertinent process design and permit compliance considerations presented in the PDR. The Commission finds that Division review and approval of the PDR, coupled with certification by the registered professional design engineer that the final construction drawings and specifications are consistent with the PDR and the design criteria is an efficient design review alternative for both Division staff and the applicant in certain circumstances.

The Commission excluded from the streamlined process designs proposing inclusion of a new technology not covered by the State's design criteria policies or guidance as well as projects where the conditions of receipt of funding require that the final design documents be reviewed and approved by the Division. In the case of new technology, the Commission finds that these proposals require a full Division review to assure that the proposed combination of treatment processes can be operated in a manner that will result in consistent compliance with the effluent limitations. Projects funded under the state revolving loan program and similar public sources may require a full review of the final design documents and construction inspections to ensure all facilities, including non-process treatment components, are installed and functional. The Commission excluded such projects from the streamlined design review process to avoid conflicts that may jeopardize such funding. The Commission included an explicit provision that requires the project owner to make modifications as directed by the Division where it is discovered that treatment plant construction is not consistent with the PDR, design criteria, and approved variances. The Commission intends that this provision provide the Division with the authority and flexibility to address situations where post-construction inspections discover inconsistencies that could affect the treatment plant's ability to be properly operated, maintained, or to meet required effluent limits.

Because the Division has historically utilized a consolidated site application/design review process for lift stations and interceptors, the design review procedure for these structures is unaffected by the new streamlined process.

Reserved – (22.12 to 22.15): These sections are reserved for potential future use.

Parties to the Rulemaking Hearing

1. Metro Wastewater Reclamation District 2. North Front Range Water Quality Planning Association3. Pueblo West Metropolitan District4. Pikes Peak Area Council of Governments5. City of Pueblo6. Denver Regional Council of Governments7. Colorado Springs Utilities8. JDS Hydro Consultants, Inc.9. Widefield Water and Sanitation District10. Denver Water

Editor's Notes

History

Sections 22.1 - 22.11, 22.23 eff. 09/30/2009.