STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY, AND PURPOSE FOR THE AMENDMENT OF RULE 5.2.9 OF THE RULES AND REGULATIONS FOR THE MANAGEMENT AND CONTROL OF DESIGNATED GROUND WATER 2 C.C.R. 410-1 February 24, 2017

I. STATEMENT OF PURPOSE

The purpose of the amendment to Rule 5.2.9 of the Rules and Regulations For the Management and Control of Designated Ground Water ("Designated Basin Rules" or "Rules") is to determine that the Alluvial Aquifer, Fan Aquifer and White River Aquifer within the Upper Crow Creek Basin are overappropriated, requiring approval of a replacement plan to obtain new permits for large capacity wells in those aquifers.

II. STATEMENT OF BASIS AND SPECIFIC STATUTORY AUTHORITY

A. Basis and Relevant Provisions of Statute and Rule

Pursuant to Section 37-90-107(5), C.R.S., the Colorado Ground Water Commission ("Commission") has the authority to ascertain whether a new large capacity well will unreasonably affect the rights of other appropriators and impair uses under existing water rights beyond a reasonable economic limit of withdrawal or use, and determine what amount of lowering of the water level caused by a new large capacity well would unreasonably affect the rights of other appropriators and impair the uses of existing water rights.

Pursuant to Designated Basin Rule 4.2.20 "Overappropriated Aquifer" means an aquifer for which the net average annual depletion rate of ground water is considered to be in excess of the allowable net average annual depletion rate for that aquifer as set by the Commission.

In making a determination that aquifers in the Upper Crow Creek Designated Ground Water Basin are overappropriated, the Commission is:

- 1. Making a determination that the net average annual depletion rate of the aquifer associated with the currently issued large capacity well permits is in excess of the allowable net average annual depletion rate of ground water for the aquifer.
- 2. Ascertaining that any withdrawals pursuant to a new large capacity well permit would unreasonably lower the water level and unreasonably affect the rights of other appropriators and impair the uses of existing water rights (absent approval of a replacement plan).

If there is more water discharging from an aquifer than is recharging into the aquifer, with the result that there is a decline in the amount of water stored in the

aquifer, the aquifer is physically overappropriated. If the physical state of the aquifer is overappropriated there exists a rationale for the Commission to determine that the aquifer is an overappropriated aquifer as defined in Rule 4.2.20.

Prior to this rule change, pursuant to Designated Basin Rule 5.2.9, the Fan Aquifer east of Crow Creek and the White River Aquifer underlying this part of the Fan Aquifer were determined to be overappropriated as defined in the Rules.

The petition that was submitted to the Commission requesting this change to Rule 5.2.9 contains information the Petitioners state exhibit a downward trend in measured static water levels in wells withdrawing water from the subject aquifers since at least 1960. Declines in water levels indicate the aquifers are physically overappropriated.

The petition contains information indicating, and the Petitioners have stated to Staff of the Commission, that the production rates from the Petitioner's wells withdrawing water from the subject aquifers has decreased since those wells were drilled, and continue to decrease. The petition states that the Petitioners' wells currently irrigate fewer acres than the permitted acres due to decreases in production capacity. The petition states that many of the Petitioners' wells suffer dramatically reduced yields or fail in the latter half of the irrigation season, indicating that the useable aquifer has effectively been depleted at existing pumping levels. Decreases in production rates indicate a decline in water levels, which indicate the aquifers are physically overappropriated.

The Petitioners have stated to Staff of the Commission that they have measured water levels in their wells that produce from the subject aquifers (both in areas that are currently determined to be overappropriated and areas that are currently not determined to be overappropriated) and that such measurements show a downward trend in water levels. The Petitioners have stated to Staff of the Commission that they have talked to other well owners within the Basin who state that wells have to be drilled deeper in the subject aquifers than they did in the past to reach the water table and produce usable rates of flow. Downward trends in static water levels indicate that the aquifers are physically overappropriated.

The report titled *Special Publication 29, Water Resources of Upper Crow Creek, Colorado*, dated 1986, by Robert M. Kirkham and John W. Rold of the Colorado Geological Survey ("Kirkham Report") that was prepared for use by the Commission in deciding whether to create the Upper Crow Creek Basin in 1987, contains the following information.

a. Water levels in the Fan aquifer and White River aquifer were declining during the period prior to designation of the Basin, and exhibited trends indicating that such declines would continue.

- b. The Alluvial aquifer, Fan aquifer and White River aquifer are all unconfined and act as a single aquifer system.
- c. A water budget of the unconfined single aquifer system shows an annual reduction in storage of 1,300 acre-feet, indicating that the aquifers were physically overappropriated at the time of designation.

Based on the available information as given above the actual physical net average annual rate of depletion of ground water in the Alluvial Aquifer, the Fan Aquifer, and the White River Aquifer in the Upper Crow Creek Basin is in excess of the actual physical net average annual rate of recharge to those aquifers, with the result that the amount of water stored in those aquifers is declining. Therefore those aquifers warrant a determination that the net average annual depletion rate of the aquifer associated with the currently issued large capacity well permits is in excess of the allowable net average annual depletion rate of ground water for the aquifer. Such a determination means:

- 1. The aquifers are overappropriated as defined by Rule 4.2.20.
- 2. Any withdrawals pursuant to a new large capacity well permit in the aquifers would unreasonably lower the water level and unreasonably affect the rights of other appropriators and impair the uses of existing water rights in those aquifers (absent approval of a replacement plan).
- B. Specific Statutory Authority Concerning Rule Making

The Commission's Rules and any amendments thereto are promulgated pursuant to Section 37-90-111(1)(h), C.R.S. to carry out the authority and responsibilities of the Commission to supervise and control the exercise and administration of rights acquired to the use of designated ground water. The proceedings were conducted pursuant to the Commission's Rules for Procedure for All Hearings Before the Colorado Ground Water Commission, 2 CCR 402-3.

The Commission announced the required Section 24-4-103(2), C.R.S. notice and invited public comment and participation during the stakeholder process. The proposed rule, and a proposed statement of basis, specific statutory authority and purpose were made available to the public at least five (5) days prior to the hearing as required by Section 24-4-103 (4)(a), C.R.S.

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