## STATE OF COLORADO

OFFICE OF THE STATE ENGINEER Division of Water Resources Department of Natural Resources

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## POLICY MEMORANDUM 94-4

October 13, 1994

**SUBJECT:** Small Capacity Commercial Wells for Confined Animal Feeding Operations Designated Ground Water Basins

Effective immediately, the following policy will be used to permit the use of ground water through small capacity commercial well permits for confined animal feeding operations within designated ground water basins. This policy shall be modified or revoked only in writing.

- 1) The total amount of water permitted to be withdrawn from a small capacity commercial well shall be limited to the amount of water estimated to be necessary for the operation of the facility and safe disposal of the effluent, considering the requirements of this policy. The State Engineer's rules for small capacity well permits in designated basins, the provisions of Section 37-90-105, C.R.S. and the rules and regulations of local ground water management districts shall also apply.
- 2) The applicant may either accept the State Engineer's guidelines (to be developed) for withdrawal limitations or supply a report detailing the amount of water estimated to be necessary to operate that particular facility. This report shall include an estimate of total water use, the estimated water use in individual categories including (as appropriate), but not limited to, drinking, flushing, washing, and office use, and any information necessary to verify the water use estimates. This report is subject to review and acceptance by the State Engineer. All applications must include a description of the land on which the effluent will be disposed and the Permit Nos. of any irrigation wells which are permitted to irrigate the subject land.
- 3) Diversion of water from a small capacity commercial well for dilution of effluent, except for water used in the normal operation of the confined animal feeding operation for drinking, flushing, washing and office use, is not permitted unless specifically applied for in the well permit application and approved after consideration of the following criteria:

a. Supporting documentation for the use of water requested for the required dilution must be provided with the well permit application. Only the minimum amount of water necessary may be permitted for dilution use. b. The use of water from a small capacity commercial well to dilute effluent will not be permitted if it is determined by staff that the intent and/or effect is to obtain a benefit of crop irrigation through a small capacity well.

c. The use of water from other wells for the dilution of effluent must be approved in writing by the State Engineer's Office and/or the Ground Water Commission, as appropriate, prior to commencement of such action.

- 4) The disposal of effluent through application onto dry land or onto land permitted for irrigation may not be commenced until authorized, if required, by the Colorado Water Quality Control Commission pursuant to the "Confined Animal Feeding Operations Control Regulation" 4.8.0 (5 CCR 1002-19) and/or other requirements of that agency. It shall be the responsibility of the operator to determine if such authorization is mandated. A memorandum of understanding between this office and the office of the Water Quality Control Commission will be drafted to facilitate safe disposal of effluent.
- 5) A totalizing flow meter must be installed on the wellhead to measure the total production of the small capacity commercial well. Flow meters should be easily accessible so that authorized representatives of this office and the local Ground Water Management District may inspect and read these meters at any reasonable time. Furthermore, flow meters must either be accessible without entering restricted areas of the facility or must be equipped with a remote display that is accessible without entering restricted areas of the facility.
- 6) Unless otherwise specified by the approval, annual reports must be submitted to the District and/or this office by February 15 of each year for the preceding calendar year. These reports must provide the total withdrawal of water from the small capacity commercial well and the total and average number of animals present that calendar year.

## Explanation of the Rationale for Policy Related to Permitting the Use of Ground Water through Small Capacity Wells for Confined Animal Feeding Operations.

The development of this policy was due specifically to concerns expressed to the State Engineer's Office about the use of small capacity commercial wells for the disposal of effluent through land application. On one side of the issue is the fact that new appropriations for irrigation wells can no longer be obtained in most designated basins, and that through land application of effluent and water used to dilute the effluent, the effective irrigation of additional lands may be possible. This would circumvent the authority of the Ground Water Commission and the appropriation process under Section 37-90-107, C.R.S., and possibly cause unreasonable impairment of existing water rights. On the other side of the issue is the fact that land application of effluent, if properly administered, may be a practical, efficient, economic and safe method of effluent disposal.

Considering both arguments, the use of ground water for the disposal of effluent through land application can be permitted through a small capacity commercial well since this may generally not result in the additional use of water over that required for the operation of a confined animal feeding operation which uses lagoons for effluent disposal. This is justified through the assumption that the present practice of using lagoons for effluent disposal usually results in the evaporation of all water that reaches the lagoon. Additional use that occurs due to necessary dilution of the effluent may be a valid use, providing that the intent and/or effect is not illegal crop irrigation through a small capacity well.

Specific problems that the above policy is designed to alleviate are as follows:

- 1) Irrigation of additional acres through the disposal of effluent onto lands not permitted to be irrigated
- 2) Use of a small capacity commercial well to supplement a poorly producing irrigation well or as an alternate point of diversion for an irrigation well

Both of these problems are addressed by assuring that the intent and/or effect is to dispose of effluent, and **not** to obtain the benefit of crop irrigation through a small capacity well.

D. Simpson

Hai D. Simpson State Engineer

HDS/PD/CML/effluent.dft