TEXAS NATURAL RESOURCE CONSERVATION COMMISSION TECHNICAL PEER REVIEW DOCUMENT

TITLE OR ISSUE Waste Analysis Plans: Sampling and analysis of injected waste fluids for Class I injection wells. DOCUMENT INITIATED BY (Name/Office/Phone Number) Ben Knape/UIC Permitting Team/UURW/I&HW/OWM 12/18/96

ISSUE DESCRIPTION

Inspectors and operators are not clear on sampling and analysis of injected fluid requirements for Class I underground injection wells.

WHO'S AFFECTED?

All Class I Underground Injection Control well operators, TNRCC UIC technical staff and inspectors.

This Section to be Completed by Peer Review Team

FACTORS CONSIDERED

Confusion has existed on this issue as to what is required because hazardous waste Class I wells are subject to an EPA "no-migration" demonstration under 40 CFR 148, in addition to the requirements of TNRCC rules. Also, due to the variability of the waste streams they inject, commercial injection well facilities are required to submit additional information beyond non-commercial site requirements. All Class I wells in Texas must develop and follow a written UIC waste analysis plan (30 TAC §331.64) as approved by TNRCC through the permitting process. Currently this is included in TNRCC-UIC Class I Injection Well Application Form (Form TNRCC-0623 [Revised 8/15/96]), Table III.C. (Waste Analysis Plan).

FINDING(S) AND RECOMMENDATION(S)

The owner or operator is required to develop and follow a TNRCC approved waste analysis plan that describes the procedures to be carried out to obtain a detailed chemical and physical analysis of a representative sample of the waste including the quality assurance procedures used (30 TAC §331.64). Injection fluids are to be sampled and analyzed with a frequency sufficient to yield representative data of their characteristics (30 TAC §331.64(a)).

According to 30 TAC §331.64(a)(1), at a minimum, the approved waste analysis plan should specify:

- 1) The parameters for which the waste will be analyzed and the rationale for the selection of these parameters;
- 2) The test methods that will be used to test for these parameters; and
- 3) The sampling method that will be used to obtain a representative sample of the waste to be analyzed.

The rules also require the following procedures be implemented related to waste analysis; however, these procedures are not required to be included in the waste analysis plan.

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The owner or operator shall repeat the analysis of the injected wastes as described in the waste analysis plan and when process or operating changes occur that may significantly alter the characteristics of the waste stream (30 TAC §331.64(a)(2)). The owner or operator shall conduct continuous or periodic monitoring of selected parameters as required by the executive director (30 TAC §331.64(a)(3)). The owner or operator shall assure that the plan remains accurate and the analyses remain representative (30TAC §331.64(a)(4)). The annual injection zone report is required to contain a current injection fluid analysis for non-commercial wells only (30) TAC §331.65(b)(3)(C)). This is interpreted to require that the injection fluid must be analyzed at least annually. Recent permit applications have been required to include a completed Table III.C. in the permit application form, in satisfaction of the UIC waste analysis plan requirement. However, any plan which has been approved by TNRCC through the permitting process and which satisfies the above-cited requirements may be used. Therefore, waste analysis plans in formats other than that of Table III.C. are approvable if they satisfy the above-cited requirements of 30 TAC §331.64(a). **COMMENTS INITIALS** REVIEW COMPLETED BY **NAMES DATE** Ben Knape, UURW X Technical Review Group Charles Greene, UURW Hong Guo, UURW Jim Boswell, UURW NA Section Technical Panel Mike Hull, Region 1 Aron Athavaley, Region 12 **NA** Division Senior Technical Committee MarkCheesman, Merichem Steve Fotadies, DuPont Chief Engineer/Senior Technical Council James Clark, DuPont Send copies to: □ Case File ☐ Case Coordinator □ Central Records □ OP&RD ☐ Issue Initiator □ Other: <u>ED</u>, <u>Deputy Directors</u>, <u>Deputy Directors</u>

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