TWP 94

State of New Mexico
ENVIRONMENT DEPARTMENT
Harold Runnels Building
1190 St. Francis Drive, P.O. Box 26110
Santa Fe, New Mexico 87502
(505) 827-2850

BRUCE KING
GOVERNOR

JUDITH M. ESPINOSA
SECRETARY

RON CURRY
DEPUTY SECRETARY

M E M O R A N D U M

To: Barbara Hoditschek, Permitting

From: Steve Alexander, Technical Compliance

Date: January 26, 1994

Subject: **TransWestern Pipeline (TW), Compressor Station No. 9, June 21, 1993, Liquid Waste Impoundment Closure Plan**

The following is an evaluation by the Technical Compliance Program of the subject submittal. This review focuses on the submittal's proposal for assessing groundwater and soil contamination. Quotes in bold, below, are taken directly from the text and are provided for clarity. Technical comments/questions follow the quotes.

Item	Description
1	(p. 5, Section 5.0,): "**Summary of Interim Corrective Measures**" In an effort to track the progress of the interim measures HRMB is requesting a report describing the status of the interim measures be submitted on a monthly basis.
2	(p. 5, Section 6.0, first paragraph): "**Remediation of the shallow perched zone...**" Is this the "natural clay basin", and the "natural depression", described in earlier portions of the Closure Plan? This is confusing and may lead to misunderstandings in the future. It is suggested that TW assign a formal title to the liquid waste impoundment for all subsequent documention. For purposes of the assessment portion of the Closure Plan the saturated material within the liquid waste impoundment will be referred to as the "perched aquifer".

3 (p. 5, Section 6.0, second paragraph): "**The vertical and lateral extent of contamination in this zone has been clearly defined.**" Please provide the documentation necessary to support this statement. The copy of the Brown and Root letter report, enclosed in a September 7, 1993 letter to Mr. Edward Horst, is insufficient documentation to support this statement.

4 (p. 6, Section 7.0, paragraph three): "**Additional investigations and evaluation are required prior to development of a final corrective measures plan for the lower unconfined aquifer.**" The requirements for additional investigations (a ground-water quality assessment plan) are outlined and described in 40 CFR, Sections 265.93(d)(4), 265.93(e) and Section 265.94(b). Additional requirements pertaining to the ground-water quality assessment plan may be found at 40 CFR, Sections 265.112(b)(4) and 265.112(b)(5).

For purposes of the assessment portion of the Closure Plan the "lower unconfined aquifer" will be referred to as the "uppermost aquifer". Please see 40 CFR, Section 260.10 for the definition of "uppermost aquifer".

In an effort to provide guidance on the contents of an acceptable ground-water quality assessment plan, it should include, at a minimum, the following specifics:

1. a characterization of the uppermost aquifer including flow nets, cross-sections, hydraulic conductivities of the aquifer and any confining units based upon site specific data (pump or slug test data), and all calculations of hydraulic conductivity based on the data.

2. the hydrogeologic conditions and potential contaminant pathways,

3. the proposed assessment monitoring system,

4. the investigatory approach that will be used to fully characterize the rate, extent and concentrations of hazardous constituents and each investigatory phase involved,

5. the number, location and depth of the wells that will initially be installed and the rationale for these decisions,

6. the strategy to be used in subsequent investigatory phases,

7. the chosen method of well drilling, construction and completion,

8. the sampling and analysis program (plan) that will be used,

9. the data analysis procedures that will be used to interpret the analytical data, and

10. the schedule of implementation of each phase of the assessment program.

5 (p. 6, Section 7.0, paragraph four): "**...an inside-out approach will be used to determine boring locations.**" The general application of an "inside-out" approach to investigating the contamination, both within the perched aquifer and the uppermost aquifer, is acceptable. The quoted approach, however, is inadequate to delineate the horizontal and vertical extent of contamination.