

TWP 94

MEMORANDUM

TO: Cornelius Amindias, RCRA Permitting Section

FROM: Teri Davis, RCRA Technical Section

THROUGH: Lee Winn, RCRA Technical Section Supervisor

DATE: June 10, 1994

SUBJECT: **Technical Review of Transwestern Pipeline Company (TW)
Closure Plan for Roswell Compressor Station Surface Impoundments, May
31, 1994.**

GENERAL COMMENTS

The facility must meet the intent of the performance standards under 40 CFR Parts 256.112 and 270.2(c)(5). Reference to 264 standards found in this review are intended to meet these standards.

In general, the major technical deficiencies found in this closure plan are as follows following:

- o The facility appears to misunderstand the meaning and use of RCRA regulatory levels.
- o The facility appears to misunderstand the use of the TCLP method.
- o Past sampling investigations lacked analysis for appropriate Appendix IX parameters (SVOC, metals, indicator parameters, etc.).
- o It may be technically infeasible to clean-up groundwater within a reasonable time-frame to apply for clean-closure.
- o The closure plan lacks an adequate assessment approach:
 - 1) lacks adequate characterization of individual pits.
 - 2) lacks a phased investigation for soil and ground-water assessment to adequately define the extent of contamination.
 - 3) lacks a plan for a risk-assessment after the extent of contamination has been determined. A risk-assessment will provide media clean-up standards to be used in corrective action.

4) lacks adequate sampling plan (phased approach, sampling locations, sampling frequencies, sampling parameters, contingency plan, and reporting requirements).

ITEM COMMENT

1 (Cover letter) As stated in TW cover letter, May 31,1994, "the compounds which have triggered RCRA involvement at this site are present in concentrations below USEPA proposed action levels for RCRA closure(proposed Subpart S, 7/27/90)" it should be clarified that acceptable ground-water protection standards for RCRA units are derived not only with the guidance of Subpart S (Appendix A[Examples of Concentrations Meeting Criteria for Action Levels],B[Maximum Contaminant Levels], and C[Range of Concentrations for Establishing Media Protection Standards for Carcinogens], but also consider New Mexico and U.S. EPA Drinking Water Standards as well as risk-assessment derived concentrations that consider the effects of multiple constituents.

Semi-volatile organic compounds (SVOC), volatile organic compounds (VOC), and metals have been detected above acceptable levels in the groundwater in the uppermost aquifer underlying the subject regulated units (see Tables 3-4. and 3-5. Closure Plan). The determination of a release from the unit(s) has already been shown by previous analysis performed indicating SVOC, VOC, and metals above appropriate regulatory levels.

Also to clarify, the Toxicity Characteristic Leaching Procedure (TCLP) is designed to determine the mobility of both organic and inorganic analytes present within wastes. This test is not appropriate for comparison with concentration limits to be established in the permit under 264.94 to ensure hazardous constituents under 264.93 do not exceed Part 264.92 ground water protection standards.

2 (1.2, pg.2) Bullet #7 indicates that TW intends to apply for clean closure certification. Data shows that the uppermost aquifer has been impacted thereby requiring both a detailed ground water assessment plan and a corrective action program. Can clean closure be achieved when sampling results show that ground water has been impacted?

3 (2.1, pg.5) The latitude and longitude of all three surface impoundments should be included in this section.

TW

June 10, 1994

Page 3

- 4 (2.2, pg.6) This section must contain information describing knowledge of process for the spent halogenated solvents (F001 wastes). How where these wastes utilized at this facility, what was the disposal practice (burning pits?), how much of the waste was handled at the facility during what periods of time, etc. What prompted TW to believe that a contamination problem may exist at the compressor station. What lead to the initial soil gas survey? TW must explain and clarify these comments.
- 5 (2.2, pg.8) It was agreed upon in the April 8, 1994 meeting held between TW and NMED that the specific locations of the surface impoundments would be investigated by geophysical methods. The specific geophysical methods should be specified in the closure plan. This approach is lacking in the closure plan and must be conducted to supplement the aerial photography review.
- 6 (3.6.3, pg.26) The sentence "the lateral extent is bounded on-site by two clean monitor wells along the northern (MW-5) and eastern (MW-3) fencelines" must be retracted until Appendix IX sampling verifies this statement. Additionally, the background water quality needs to be determined and a statistical method specified to be used in evaluating ground-water monitoring data for all hazardous constituents listed in Appendix IX. The background water quality evaluation must follow the requirements under Part 264 Subpart F.
- 7 (3.6.3,pg.26) Ground-water elevations are not included in this closure plan preventing the evaluation of the direction of ground-water flow using MW 1B, 2,3,and 5. The closure plan must include estimates on direction of ground-water flow based on data from monitoring wells completed within the uppermost aquifer.
- 8 (3.6.3, pg.27) Include a descriptive summary of the ground water impacts in this section.
- 9 (4.0, pg.28) All surface impoundments should be characterized with respect to Appendix VIII hazardous constituents. Two borings per surface impoundment would be adequate. The analytical results from the borings will not exclude any hazardous constituents from the Appendix IX sampling of monitoring wells.
- 10 (4.1, pg.28) Based on the results from the surface impoundment characterization a hazardous constituent list for the soil-assessment plan should be compiled for HRMB's approval.

- 11 (4.1, pg.28, Fig.4-1) The proposed soil boring locations in Figure 4-1 are inadequate to assess the extent of contamination. As mentioned in the previous NOD, the investigatory approach that will be used to fully characterize the rate, extent and concentrations of hazardous constituents and each investigatory phase involved will specify the number, location and depth of sampling and the rationale of sampling locations should be clearly stated. A phased approach to the soil assessment should be included in this section. For example, if contamination is detected in the Phase I soil borings, a Phase II sampling plan will be submitted HRMB for approval to further define the extent of soil contamination. A contingency sampling plan should be included in this section which will include such information as a predetermined distance (horizontal and vertical) and direction proposed to extend the sampling locations when contamination is detected in any of the soil borings. This approach will assure that the extent of contamination in a lateral manner and vertical manner has been assessed.
- 12 (4.1, pg.28) Include in this section a reference to the SOP for assuring that cross-contamination between zones of saturation (upper clay water and the uppermost aquifer) will not occur.
- 13 (4.4, pg. 30) Laboratory analysis of soil samples should include Appendix VIII hazardous constituents for the soil samples characterizing the surface impoundments. Appropriate analytical methods and parameters should be in accordance with 40 CFR 261 Appendix VIII suggestions. Based on the results from the surface impoundments, the regional administrator will determine what hazardous constituents will constitute the list for sampling during the phased investigation for soil assessment.
- 14 (5.1, pg.34) All monitor wells will be constructed in accordance with the EPA RCRA Ground-water Monitoring Technical Enforcement Guidance Document (September 1986) and updates as appropriate from the EPA RCRA Ground-Water monitoring: Draft Technical Guidance (November 1992). The screened intervals proposed in the closure plan should not exceed fifteen feet of screen within the aquifer.
- 15 (5.1, pg.34) The latitude and longitude of all monitoring wells to be utilized in the compliance monitoring program and corrective action program should be summarized in table form. Replace the location system shown in Table 3-1 with the latitude-longitude system for consistency with SEO records and surface impoundments descriptions.

- 16 (5.1.1, pg.34) The proposed locations of the monitoring wells are not adequate with respect to detecting immediate releases from the regulated units. All three surface impoundments should have at least three wells located immediately adjacent AND downgradient from the units.
- 17 (5.1.1, pg.34) The proposed monitoring well locations in Figure 5-1 are inadequate to assess the extent of contamination. As mentioned in the previous NOD, the investigatory approach that will be used to fully characterize the rate, extent and concentrations of hazardous constituents and each investigatory phase involved will specify the number, location and depth of sampling and the rationale of sampling locations should be clearly stated.

A phased approach to the ground-water assessment needs to be included in this section. If contamination is detected in the initial downgradient monitoring wells, a Phase II sampling plan will be submitted HRMB for approval to further define the extent of ground-water contamination. A contingency sampling plan should be included in this section which will include such information as a predetermined distance and direction proposed to extend the sampling locations in a lateral and vertical manner to determine extent. Once the rate and extent of groundwater contamination has been determined a baseline Risk Assessment followed by a corrective active program should be proposed.

- 18 (5.1.2, pg.35) The deep aquifer investigation should be a continuation of the ground-water phased investigation. If ground-water contamination is found in any of the monitoring wells to be installed immediately downgradient from the regulated units, a deep monitor well will be installed to determine vertical extent of contamination. A background well should also be installed to determine background conditions required in 40 CFR Parts 264.
- 19 (5.3, pg.37) This section should be revised to be consistent with the requirements of ground-water sampling under Parts 264.97 and 264.99.
- 20 (5.4, pg.39) Laboratory analysis of ground-water samples will consist of the Appendix IX ground-water monitoring list for all compliance monitoring wells as outlined by the requirements of Part 264.99 and 264.97. Appropriate analytical methods and parameters should be in accordance with 40 CFR 261 Appendix VIII suggestions. Based on the analytical results from the initial compliance monitoring wells the regional administrator will determine what parameters can be excluded from the Appendix IX list during the phase I ground-water assessment plan. Table 5-1 should be revised as appropriate.

- 21 (5.3, pg.38) The interface between the PSH and water level should be determined by use of appropriate equipment or probes. The procedures for detecting and measuring immiscible layers should be outlined in the QAPjP. Guidance on this procedure should follow EPA RCRA Ground-Water Monitoring: Draft Technical Guidance (November 1992).
- 22 (6.1, pg.43) This section should be changed in accordance with comment # and Part 264 requirements.
- 23 (6.2, pg.45) Detection limits for EPA methods in Table 5-2 should be consistent with comment # 20.
- 24 (7.1, pg.51) The interim measures should continue.
- 25 (7.3, pg.52) HRMB is reserving comment on the soil and ground-water remedial options until the soil and ground-water assessments are complete and a baseline risk-assessment has been conducted. Guidance on the process of corrective action can be found in Subpart S.
- 26 (7.5, pg.56) Clean-up criteria should be determined through a risk assessment to determine the risk associated with multiple contaminants. The Subpart S Standards are action levels and not necessary cleanup standards. If a hazardous constituent is found to be above Subpart S action level then further investigation is triggered. Guidance for risk-assessment can be found in EPA's Risk Assessment Guidance for Superfund (RAGS) manuals. A baseline risk-assessment (RA) should be proposed after the results of the phase I soil and ground-water sampling results have identified the hazardous constituents that will specified in the permit and the extent of contamination has been determined. The baseline RA will aid in determining the media cleanup standards for contamination in soil and ground water underlying the regulated units at TW.
- 27 (Table 3.1) The elevations of monitoring wells needs to be determined.
- 28 (All Tables) Tables showing analytical results should include a column showing appropriate regulatory levels for comparison to the data.
- 29 (Figure 3-5) Pit 3 is labeled twice while pit 2 is missing.

TW

June 10, 1994

Page 7

- 30 (All Figures) The locations of MW 2 and MW-5 are not consist with past documents submitted to HRMB. This discrepancy needs to be clarified.

- 31 (Appendix E) The data for MW-2 is missing. This data should be included in this section.