NMED 9-14

MEMORANDUM

ENTERED

TO: Steve Pullen, NMED
Stephanie Kruse, NMED

FROM: June K. Dreith, TechLaw JKD

DATE: October 26, 2000

RE: Informal Review of the September 6 and September 12 NMED NODs

Below is TechLaw's informal review of the two outstanding NODs issued by NMED regarding Gandy-Marley (Triassic Park) Hazardous Waste Facility application. As discussed in a telephone conversation, only sufficient issues were reviewed by TechLaw. Issues associated with editorial, grammar, or minor wording were not reviewed.

The issues TechLaw has comments on are addressed below. For ease of reference, TechLaw has utilized the same comment number as was on the September 12, 2000 NOD. TechLaw has no comments on the Facility's responses to the September 6, 2000 NOD.

Review of Response to NOD Comments – September 12, 2000

1. Section 4.1.2, Prohibited Waste, p. 1, 1st bullet. **"...Soils.., except for bulk PCB-contaminated remediation waste...."**

   GMI must decide whether it will accept all bulk PCB-contaminated remediation wastes or whether it is restricting itself to soils.

The revised Section 4.1.2 contains additional language which indicates that the facility intends to accept PCB contaminated wastes for soils as well as other PCB contaminated waste matrices. However, there is no further explanation of what additional matrices would be accepted. The facility should have provided a list of PCB contaminated waste matrices that are acceptable based upon the available storage, treatment, and disposal capabilities of the facility.

2. Section 4.1.2, p. 2, 3rd bullet. **"radioactive/nuclear materials. - "**

   To make this definition all-inclusive, GMI should add, "or other naturally occurring materials which contain radioactivity concentrations above the levels regulated under 20.3.1.14 NMAC."

The permittee added a specific reference to the 20.3.1.14 NMAC requirements as well as the Atomic Energy Act of 1954 in which it was indicated that materials regulated under these statutes would be prohibited wastes. More appropriately in the context of the NOD comment,

the permit should indicate that wastes containing these regulated materials above regulation specified limits would be prohibited.

3. Section 4.5, Waste Analysis.

GMI must revise the text of Section 4.5 throughout that refers to "...other nationally recognized standards." Analytical methods must be specified in the permit application, as required by 20.4.1.500 NMAC, incorporating 40 CFR 264.13(b)(2) and 40 CFR 270.14(b)(3). Methods acceptable to NMED include EPA Publication SW-846 and certain ASTM methods approved by EPA, and these methods must specified in Tables 4-1 through 4-3. The use of other methods is hazardous waste- or constituent-specific and must be justified to the satisfaction of NMED before use.

Tables 4-1 through 4-3 still have the following deficiencies:

- *The Tables are identified to only contain example methods and the final determination of methods will be made dependent upon the waste form, expected constituents, and available information regarding the waste. This definition leaves the permittee the option of choosing any approved or unapproved method of analysis.*

- *Although several of the method numbers found in Tables 4-1 to 4-3 appear to be consistent with SW-846 method numbers, these tables should clearly identify the method source for each entry. In addition specific methods and sources were not identified for the pH paper and pH electrometer methods.*

- *Non SW-846 or ASTM methods were referenced with no indication that these methods have been reviewed or approved by NMED.*

- *Table 4-2 contains several method descriptions that do not have referenced method numbers or sources including chlorinated solvents, specific gravity, and miscibility.*

4. Section 4.5.5.5, Waste analysis requirements specific to the landfill, p. 24, 6th bullet.

GMI must explain how they will meet the performance standards for incompatible waste specified in 40 CFR 264.313 and 40 CFR 264.17(b) and (c).

Section 4.5.5.5 indicates that incompatible wastes will be placed in non-adjacent landfill grids and treatment of potentially non-compatible wastes. However, there was no indication of the objective of the treatment, which should be to modify the condition that caused the incompatibility to the extent that the waste is no longer incompatible. The practice of placing incompatible wastes in non-adjacent cells is correct. However, there is no discussion of how the

facility will identify what wastes are in each cell, how the contents of each cell are documented and tracked, and how they intend on assessing the compatibility of each waste. The facility also did not account for the possibility that there are no available non-adjacent cells in which to place incompatible waste. The facility should address their intended plan of action if this scenario should occur.

5. Section 4.5.6, Waste Analysis Requirements for Waste Generated On-Site, p. 25, 5th paragraph. **"Leachate generated from the landfill will be pumped out of the unit sumps into tanks or tanker trucks."**

   Vol. I, Section 2.5 (and possibly Vol. III, Section 3.0) of the permit application indicates that leachate from the landfill will be hard-piped to the leachate storage tank. GMI must make these statements consistent with one another.

The section has been modified to only indicate that leachate from the landfill will only be out of the unit sumps into temporary leachate storage tank. The leachate will then be tested to assure compliance with LDR requirements defined in 40 CFR 268 for F039 wastes. However, there is no indication of how the facility will determine what tests are needed and the frequency of the tests, either on a periodic or batch basis.

6. Section 4.5.6.2, Selection of waste analysis parameters, p. 28, 4th paragraph.

   See Deficiency No. 8. **"leachates will be analyzed separately at least once a month at the point of generation. These leachates will be analyzed for all constituents specified in 40 CFR 264 Appendix IX using appropriate methods specified in SW-846."**

   GMI must indicate that the monthly sampling and analysis of leachate at the point of generation is for all F039 underlying constituents, and that a biennial sampling and analysis will be conducted for 40 CFR Appendix IX constituents.

The current version of Section 4 does not contain any clear indication of the sampling frequency and analytical requirements for leachate monthly or biennial sampling. In addition there are no clear sampling requirements for the analysis of other on-site waste treatment processes other than to say waste will be tested prior to disposal. The permittees should provide more detail regarding the frequency of sampling and whether the samples represent batch or process activities. Additionally there must be an explanation of the waste quantities that are represented by each sample analyzed.

7. Section 4.7, Analytical Methods, p. 34.

See Deficiency No. 8.

See response to Deficiency Number 8.

8. Section 4.7.2.3, Laboratory QA/QC Samples, p. 36, 2nd paragraph.

GMI must delete the first sentence and establish data quality objectives (DQOs) in the permit application. DQOs may also be specified in the permit. Because GMI will be required to take certain specified actions as a result of any release of hazardous waste or hazardous constituents to the vadose zone, the DQOs must include the lowest detection limits that can be practicably achieved following the specified analytical methods; these detection limits should be included in a table in the laboratory QA manual.

Section 4.7.2.4 contains a discussion of the DQO criteria for accuracy, precision, completeness, representativeness, and comparability. However, the discussion of the DQOs is not complete or adequate due to the following:

- *There is no indication of what types of QC samples will be used to assess precision and accuracy.*
- *The representativeness discussion did not indicate that the methods of collection and analysis must be appropriate for the sample media, the required detection limits, and the required analytes of interest. Additionally, this section did not reference a table in the Laboratory QA Manual that describes the method detection limits.*
- *The Laboratory QA Manual does not have a referenced title or where the contents of this document can be reviewed in the context of the application submittal.*
- *The completeness section did not indicate what constitutes acceptable data. Additionally, the completeness goals should be provided in this section because the completeness percentage goals should be independent of the method of analysis or waste stream composition.*
- *Comparability should also assess the comparability of data within referenced methods to include comparability of detection limits, preparation methods, and calibration ranges.*
- *There is no discussion of the actions that will be taken in the event that a DQO is not met.*

- *There is no discussion regarding a mechanism for assessing data quality and data usability. The only reference to data validation guidance is the Functional Guidelines for Inorganic and Organic Analyses. However, these documents are developed for CERCLA CLP methods. There was no discussion about how these guidelines would be adopted for use in evaluating data quality of SW-846 or ASTM methods.*

9. Section 4.7.2.5, Analytical procedures, p. 39, 2nd paragraph.

GMI should revise this section, and elsewhere in Section 4.0, to delete all references to the "applicable" edition of SW-846. It is unclear what GMI means by this term; in any case, NMED requires GMI, to use the most current edition of SW-846, as updated.

The reference to the applicable SW-846 edition was removed.

Also: See Deficiency No. 8. SW-846 provides test procedures and guidance for use in conducting the evaluations and measurements needed to comply with RCRA. If GMI is unable to meet its analytical requirements using SW-846, then it will be required to submit a request to NMED to use alternate methods.

There is no clear reference to the hierarchy of method use and the procedures that are used to gain approval for alternate methods.

10. Section 4.7.2.4, p. 40, 1st paragraph following list. **"Editions used will be...updated at the time of facility operation."**

GMI must delete "at the time of facility operation". See Deficiency No. 21.

The section reads that methods used will be those currently specified in 40 CFR as updated. The reference to 40 CFR is a vague reference and the appropriate reference to SW-846 and the exact section of RCRA that invokes SW-846 as the source of analytical methods should be provided instead.

11. Section 4.7.3, Requirements for Off-Site Laboratories, p. 41, 4th bullet.

See Deficiency No. 8.

See response to Deficiency Number 8.

If you have any questions, please feel free to call.