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April 14, 2000

Patrick Corser
Montgomery Watson
P.O. Box 774018
Steamboat Springs, Colorado 80477

**RE: REVISED DRAFT SECTION 10, CORRECTIVE ACTION (CA), DATED
JANUARY 7, 2000 - TRIASSIC PARK WASTE DISPOSAL FACILITY PERMIT
APPLICATION**

Dear Mr. Corser:

The New Mexico Environment Department (the Department) Hazardous and Radioactive Materials Bureau (HRMB) has completed its review of the above referenced submittal. The Department has determined that the CA Section does not sufficiently specify all of the corrective actions that must occur in the event of a release. The Department has also determined that much of the CA Section is inconsistent with anticipated draft Permit language.

The above referenced deficiencies and inconsistencies are identified in the attached comments. These comments are provided for informational purposes only and GMI should not revise the CA Section to incorporate the comments. GMI should, however, remove the inconsistent portions by withdrawing all language including and below the first full paragraph on page 10-2. The Department will proceed with establishing CA requirements in the draft Operating Permit. If GMI finds it needs to reference CA requirements in its Application, it should simply reference the Corrective Action Module of the Permit.

The Department would like to thank GMI for undertaking the unusual process of submitting CA commitments in its Permit Application.

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If you have any questions regarding this letter or the attached comments, please contact Steve Pullen of the HRMB at (505) 827-1558 ext. 1020.

Sincerely,



for
Stephanie Kruse,
Project Manager
Triassic Park Project

cc: w/attachment

James Bearzi, NMED/HRMB
Carl Will, NMED/HRMB
Dale Gandy, GMI
David Neleigh, EPA

John Kieling, NMED/HRMB
Steve Pullen, NMED/HRMB
John Pellicer, MW

NMED Comments
April 2000

CORRECTIVE ACTION (CA)- SECTION 10
(draft)
Triassic Park Waste Disposal Facility Permit Application

The New Mexico Environment Department (the Department) provides the following comment on eleven (11) issues associated with the Corrective Action Section. The 11 issues constitute neither a comprehensive nor a definitive list of Department concerns, but they suffice to show that the CA Section is deficient and that the Department should proceed with establishing the corrective action requirements in the draft Permit. As stated in the associated cover letter, these comments are provided solely as a response to the CA Section and for informational purposes. Gandy-Marley, Incorporated (GMI) should not augment its Application based on these comments, but should remove those portions that the Department anticipates will be inconsistent with the Permit and has identified below.

Of the 11 issues identified in the CA Section, Issues 1 through 3 are the general deficiencies. Issues 4 through 8 are commitments that conflict with the anticipated CA module of the Permit, and thus require removal. Issues 9 through 11 are considered appropriate and may remain in the Application.

General Deficiencies

- **Issue #1** The distinction between CA responses for regulated units (RU) and solid waste management units (SWMU)
- **Issue #2** A response to the detection of non-contaminated fluids in the Vadose Zone monitoring System (VZMS)
- **Issue #3** The recognition of the response actions in other portions of the Application

Conflicting Commitments

- **Issue #4** Investigation commitments
- **Issue #5** Response actions beyond an investigation
- **Issue #6** Notification commitments
- **Issue #7** Record keeping commitments
- **Issue #8** Contaminant level that would trigger a response

Other issues

- **Issue #9** Distinguishing contaminated from non-contaminated fluids
- **Issue #10** Identification of existing release sites
- **Issue #11** Identification of future SWMUs

GMI agreed at a September 23, 1999 meeting, held to discuss the groundwater monitoring waiver and the associated VZMS, that it would provide as part of its Permit Application a plan for responding to releases to the VZMS. GMI agreed that the following three response commitments would be provided:

- a methodology to distinguish contaminated fluids from waste management units and presumably non-contaminated fluids from other sources (**Issue #9**);
- an investigation of the extent of contamination (**Issue #4**); and,
- the removal of contamination and an approach to stop the release (**Issue #5**).

GMI's draft CA Section contains the following descriptions and commitments:

- a statement that there are no previous releases at the proposed site (**Issue #10**);
- an identification of all future SWMUs as determined in the RCRA Facility Assessment (**Issue #11**);
- a commitment to notify the regulatory authority according to the Contingency Plan (CP) (**Issue #6**);
- a commitment to keep records according to the CP (**Issue #7**);
- a commitment to perform a RCRA Facility Investigation (RFI) should a release occur (**Issue #4**); and,
- a commitment to perform a Corrective Measures Study (CMS) should a release pose an unacceptable risk (**Issue #5**).

General Deficiencies

(Issue #1) The CA Section does not make the required distinctions between corrective actions for the RUs and SWMUs. Of the units proposed in GMI's Permit Application, the landfill and the evaporation pond are regulated units (RU) and have special regulatory considerations because they have hazardous wastes intentionally placed on the land (albeit on top of barriers).

CA regulations for both RUs and SWMUs are stipulated at 20 NMAC 4.1.500 (incorporating by reference 40 CFR §264.100 and §264.101). §264.100 requires an owner/operator (O/O) to take the corrective action needed to ensure that groundwater impacted by RUs attain the appropriate groundwater protection standard. The groundwater monitoring requirement for GMI's RUs is currently waived for reasons provided in the Department's letter to GMI dated January 12, 2000. However, because a VZMS takes the place of the groundwater monitoring system, and as a condition of GMI's groundwater monitoring waiver, the Application, or alternatively the Permit, must maintain the same level of protectiveness by having special vadose zone CA requirements for the RUs.

40 CFR §264.101 requires an O/O to institute corrective action as necessary to protect human health and the environment for all releases of hazardous wastes or constituents from all SWMUs. This regulation, and EPA's corresponding Subpart S Guidance, will form the basis for the corrective action requirements for all the SWMUs identified in the CA Section. The Department believes that the CA process for RUs and SWMUs are so distinct that it anticipates two sections in the Permit addressing the issues, Modules 10A and 10B respectively.

(Issue #2) The CA Section does not sufficiently address what response GMI would take if non-contaminant fluids were detected in the VZMS. A previous GMI submittal, the

VZMS Work Plan, proposes that if non-contaminated fluids were detected, the permittee would propose “no-further-action” (NFA). This proposal is not considered by the Department to be sufficiently protective.

For the VZMS to effectively monitor for releases from a waste management unit, the wells and sumps should not be allowed to retain non-contaminated fluids. Among other things, the Department is concerned that non-contaminated fluids allowed to remain in the system would either create a reverse gradient precluding contamination from entering the system, or it would dilute entering contamination to below detection limits. The Department anticipates that the Permit will have similar requirements for the notification, investigation and removal for non-contaminated fluids as for contaminated fluids.

In conversation between HRMB and GMI representatives on April 10, 2000, GMI agreed that the response to non-contaminated fluids being detected in the VSMZ would be addressed in the VZMS WP. GMI also agreed that the response would be, at a minimum, a commitment to investigate the extent of the non-contaminated fluids and to remove those fluids to maintain the effectiveness of the system.

(Issue #3) The CA Section does not sufficiently cross reference other portions of the Application that also address corrective action. The Application’s CP addresses releases to all environmental media including soils. The Department recognizes that the CP generally addresses surficial releases requiring an immediate response, and the CA Section generally addresses subsurface releases requiring a more deliberative evaluation. These two response plans should be distinguished and should cross-reference each other.

Conflicting Commitments

(Issue #4) The CA Section commits to investigating the extent of the contamination by performing a RFI. The CA Section lacks detail as to what constitutes a RFI, and the Department presumes GMI is referring to the RFI described in EPA’s Subpart S Guidance. In general the Department feels this is an appropriate approach. However, the Department feels that the RFI process does not appropriately reflect the necessary urgency of responding to a contaminant release from a RU.

The Department’s experience is that, in general, the RFI process takes approximately one year to propose, perform and report. The Department considers the regulatory requirements and time restraints specified in the Application’s Response Action Plan (RAP) for leaks through the primary liner of the landfill, to also be an appropriate corrective action for releases through the secondary liner into the VZMS. To paraphrase the RAP, if a serious release has been detected, the permittee will “submit a written assessment to the Department within 14 days of the determination as to the amount and source of liquids; information on possible size, location and cause of the leak; ... and any immediate and short term actions to be taken;...”. Furthermore, the permittee will “submit a report to the Department within 30 days ... describing how effective the response actions have been at reducing the leakage rate ... “. The Department anticipates

that the Permit will have a combination of RAP and RFI requirements for RUs, and slightly less urgent RFI requirements for SWMUs.

(Issue #5) The CA Section's commitment to remove contamination is via a CMS process. Like the RFI, the CMS process is not extensively described in the CA Section and the Department assumes GMI is referring to the process described in EPA guidance. Here too the Department believes this may be appropriate, but that elements of the RAP should be combined with CMS processes to establish a more comprehensive response action.

The elements of the RAP that should be incorporated into the response action, besides the reporting requirements mentioned earlier, include:

- increasing the pumping rate on the leachate collection system pump (this may also apply to the Leak Detection Removal System and the vadose zone monitoring pumps);
- removal of all standing water from the surface of the landfill (and possibly all fluids from the evaporation ponds); and,
- assessment of operations to determine if waste receipt should be curtailed or wastes should be removed for liner inspection, repair or control.

(Issue #6) The CA Section commits to notifying the regulatory authority according to the CP. The CP states that the emergency coordinator (EC) will follow the off-site notification requirements when it is determined that a release poses an "immediate threat". The Department is concerned that the CP is obviously meant to address emergencies that occur at the surface (i.e., it makes no specific mention of a release detected in the VZMS) and that the EC will not consider the detection in the VZMS an immediate threat.

(Issue #7) Regarding record keeping commitments for corrective actions. Again, the Department is concerned that GMI is referencing the CP as describing those commitments, yet the CP makes no specific reference to subsurface releases.

(Issue #8) The CA Section suggests that corrective measures might be initiated should released hazardous wastes "pose a concern to human health or the environment". The Department anticipates that corrective measures will be required in the Permit for any and all releases from SWMUs, including RUs, that exceed the anticipated Permit mandated standard of background concentrations. The background standard is consistent with Section 8 of the Application, Closure and Post-closure of Regulated Units.

Other Issues

(Issue #9) The methodology to distinguish fluids from the waste management units and other sources was not addressed in the CA Section, but is addressed in the draft VZMS Work Plan (WP) dated February 11, 2000. The Department identified its concerns regarding that WP in correspondence to you dated March 16, 2000. The Department believes that the VZMS WP is the appropriate location to address the fluid distinction issues, and only mentions it here because it was suggested to be included in the CA

Section in the September 23rd meeting. The Department proposes that the corrective action process be defined as those actions taken when a release is confirmed.

The WP also contains corrective action commitments that the Department deemed inappropriate. The WP states that if the fluids are not from a waste management unit, GMI would take “no-further-action”, and, if fluids are from a unit, a “detection monitoring” program would be developed. Besides being inappropriate response actions, the WP is not the appropriate location for CA commitments, and the WP should be changed to reference the Corrective Action Module of the Permit.

If fluids detected in the VZMS are contaminated, the WP’s suggestion to initiate detection monitoring is considered by HRMB to be non-protective. Detection monitoring, as described in 40 CFR § 264.98, is a method of measuring groundwater in the uppermost aquifer at the point-of-compliance for a statistically significant detection of contamination in reference to groundwater protection standards. GMI’s detection monitoring proposal is inappropriate for the following reasons: contamination will have already been confirmed; the measuring point is not in the upper-most aquifer and not at a point-of-compliance; and, concentrations will not be compared to groundwater standards. Any detection of contamination in the VZMS will indicate a significant release, and will require investigation and control measures.

(Issues #10 and #11) The CA Section’s identification of no existing release sites and potential future SWMUs is appropriate.