

December 14, 2004

Mr. Tim G. Bonzer, Lead of Compliance
Colorado Department of Public Health
and Environment
Radiation Management Unit
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

Re: Cotter Corporation, Canon City Milling Facility RML 369-01
Notice of Violation and Response Request issued by CDPHE December 1, 2004

Dear Mr. Bonzer,

As requested in the above-captioned Notice of Violation (NOV) Cotter has completed its response to the subject NOV and by means of this correspondence transmits a description of the remedial actions and corrective measures taken (including completion dates) relative to the sodium hydroxide incident.

Item of Noncompliance

CDPHE:

The following Item of Noncompliance (violation) with the conditions of radioactive materials license 369-01, Amendment 41 was noted as a result of our investigation:

- 1. License Condition (LC) 12.6 states, "By this license, the Department does not permit, authorize, concur in, or otherwise approve of, the prohibited release or threatened release of a hazardous substance, pollutant, or contaminant into the environment."*

Contrary to this requirement, the notification of a reportable quantity of a hazardous substance to the National Response Center indicates that a hazardous substance was released or there was a threatened release into the environment. Sodium hydroxide is listed as a hazardous substance in 40 Code of Federal Regulations (CFR) 116.4. The terms environment, hazardous substance, release and reportable quantity are defined in 40 CFR 300.5. Since LC 12.6 does not permit this release, this is a violation of LC 12.6.

The licensee must outline efforts to prevent the future occurrence of releases of hazardous substances into the environment.

A written response to the Item of Noncompliance and the following Items of Concern is requested within thirty (30) days from the date of this letter. The response must include (1) demonstrations of remedial actions taken and achievement of compliance; (2) corrective steps which will be taken to avoid further Items of Noncompliance; and, (3) the date when full compliance will be achieved.

Cotter's Response:

To prevent future releases of sodium hydroxide from the storage tank, it was determined that the original containment structure surrounding the sodium hydroxide tank needed to be improved. To that end, Cotter has since engineered, designed, and constructed a more protective containment as a follow-up to the incident that will ensure control of potential future releases. Specifically, a concrete floor and retaining wall were constructed in the immediate area around the sodium hydroxide tank to provide appropriate secondary containment in the event of a spill or release of chemical from the storage tank.

Construction of the containment system commenced on October 1, 2004 and was completed on October 18, 2004. This newly constructed secondary containment structure provides containment equivalent to 110+% of the volumetric capacity of the sodium hydroxide tank. The containment structure is also fitted with a floor sump pump to accommodate rainfall accumulation and wash down requirements. Pictures of the containment structure are attached.

In addition to the construction of the containment structure around the sodium hydroxide storage tank, Cotter will complete an evaluation of containment structures around other chemical storage tanks. This evaluation will be completed by the end of January, 2005. If the evaluation indicates the need for improvements to other containment structures, those improvements will be completed by the end of June, 2005.

Item of Concern a.

CDPHE:

a. *"Mill Security Procedures Section II, item 1 states in part "A briefing will be conducted by the technician completing his shift or by his supervisor. The briefing will include but not be limited to a review of current operations, status of mill systems, and any unusual situations."*

Contrary to this requirement, and as noted in the Report received August 13, 2004, delivered electronically to the Department on August 20, 2004, the technician failed to notify the next shift (security technician) that the tank was still having water added to it.

Shift change procedures must be followed to communicate potential hazards involving radiological as well as chemical hazards.

It is noted by the Division that the "Lessons Learned" section of the August 13, 2004 report states that "The supervisor and operations personnel involved with this oversight will be counseled and provided additional training to reinforce the importance of proper utilization of Cotter's end-of-shift reporting program."

Please provide documentation, including the names and duties of the personnel who received counseling and additional training that was conducted, and the content of the training. If disciplinary measures were applied, please also provide that information."

Cotter Response:

The item of concern states that the safety/security technician on swing shift failed to properly brief the graveyard technician. This was not the case. Instead, the Operations Foreman failed to notify site Safety/Security personnel that the caustic tank was being filled that day. When Safety/Security technicians are notified of on-going operations they do make additional checks of the operation, usually on an hourly basis. However, in this instance such a notification was not initiated.

When the operations department works the day shift only, the standard procedure is to provide Safety/Security personnel with a Shutdown Checklist Notification. The foreman failed to provide this Notification to the Safety/Security personnel. Had the routine shutdown program been followed, additional checks of this specific operation would have been completed and the incident may have been prevented. In this case, the Safety/Security technician did properly relay to his relief on graveyard, the operating conditions of the plant as he was aware of them. However, the situation at this tank was not known by the technician.

Due to the failure of the Foreman (Employee # 2689) to follow the Shutdown Checklist Notification program in the mill for Safety/Security checks, he was issued a Notice of Violation of Rules and a verbal

reprimand. He was also counseled on the importance and need to file the Shutdown Checklist at the end of the shift if any parts of the operation remained in operation.

Item of Concern b.

CDPHE:

b. *"Mill Security Procedures Section IV, Safety/Security Duties--General, items 2 and 3.b require the technician on duty to inspect the plant area including a walk through of all buildings (which includes looking for leaking water or other liquids), unless the building is secured.*

Contrary to this requirement, the technician failed to perform adequate inspections to discover the leak, which by end of shift, had not only overflowed the containment, but had flooded the Fine Ore Building, and leaked out the doors, causing a release of a hazardous substance (and potentially radiological material from the floor of the building) to the environment. This was a preventable incident.

Proper inspections of the facility must be conducted to mitigate preventable releases of radiological or hazardous substances. There is no indication in the report that the security technician received any training or disciplinary action as a result of his or her failure to properly patrol the facility."

Cotter Response:

Mill Security Procedures do not specifically state when inspections are to be made. The graveyard technician made his rounds through the mill buildings early in the shift and at that time did not notice anything unusual. At approximately 3 a.m. the technician went back to conduct gas tests on tanks located outside of the Solvent Extraction building and stated that he did not see anything unusual outside of the Fine Ore Bins. If solution had been running out of the building at that time he would have noticed it because the drainage runs next to the tanks he was checking. Investigation of the time of the walkthrough inspection reinforces the fact that the inspection occurred before any solution had exited the building.

In addition, a walk-through of the building is only required when the building is not secure or when crushing operations are being conducted. In this case, the tank was being filled outside the building and the building had not been in operation. The Safety/Security technician was not reprimanded because during his routine mill walk-through, the spilled sodium hydroxide solution apparently had not begun to flow out of the building and therefore no conditions were identified that required immediate action.

In an effort to improve the effectiveness of the mill inspection program, Safety/Security personnel will be required to visually inspect containment structures around all reagent storage tanks, as a part of their daily mill walk-through.

Respectfully,

Jordan Rudel
Environmental Engineer

cc: Mr. Steve Tarlton
Mr. Phil Egidi
Mr. Steve Landau
Mr. Jim Cain
Mr. Richard Wooten

