

STATE OF COLORADO

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Dedicated to protecting and improving the health and environment of the people of Colorado

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Colorado Department
of Public Health
and Environment

February 8, 2006

Certified Mail #7005 1820 0000 3204 3379
Return Receipt Requested

Richard Cherry, President
Cotter Corporation
7800 East Dorado Place, Suite 210
Englewood, CO 80111

Subject: **Notice of Violation, Assessment of Penalties and Order**

Dear Mr. Cherry:

You are hereby served with this Notice of Violation and Order by the Hazardous Materials and Waste Management Division of the Colorado Department of Public Health and Environment (the "Department") pursuant to sections 25-1-109, C.R.S. and 25-1.5-101, C.R.S.

The Notice of Violation and Order are based upon findings by the Department that Cotter Corporation has violated Colorado's environmental laws, specifically Title 25, Article 11, CRS, Colorado Radioactive Materials License Number 369-01, and the State of Colorado *Rules and Regulations Pertaining to Radiation Control* at 6 CCR 1007-1 (the "Regulations") as more particularly described in this Notice of Violation.

I. Notice of Violation

1. License Condition 9.3 requires that the licensee shall assure that equipment and supplies are available to respond to accidents, fires, and other emergencies, and License Condition 14.1 states that the licensee shall maintain all equipment and facilities in operating condition.

Contrary to this requirement, on December 26, 2005, three emergency showers at the facility were not operational at the time of an incident that resulted in the hospitalization of a worker. Non-operational showers were located on the second floor of the grind and leach building, on the first floor of the grind and leach building, and on the first floor of the CCD wagon wheel building. Safety equipment was not properly maintained.

These are also violations of Item 53 of Compliance Order #05-05-23-01, which states: "As of the effective date of this Order, ensure that equipment is in good working order...". Cotter has failed to ensure that equipment is in good working order.

These are Severity Level I Violations: A system designed to prevent or mitigate a serious safety event not being operable when actually required to perform its design function. The penalty for each violation is \$5,000.

The licensee must ensure that all safety equipment is maintained and in operating condition in accordance with the requirements of the Regulations and the license. **Please provide a written response describing in detail how Cotter will address this condition, including prevention of freezing of water lines in the mill during winter months.**

- License Condition 16.4 requires that the licensee shall maintain a record per procedure AD-060 for each employee, signed by supervisor(s) and the RSO, which certifies that in addition to the training specified in Cotter's Radiation Protection Program Procedures, the employee has completed on-the-job training using an overall operation and maintenance competency checklist and work process competency checklists appropriate to the employees work locations.

Contrary to this requirement, documentation of training was inadequate. The injured worker's Leach Operator Global Competency Checklist and Leach Autoclaves Operation Competency Checklist were filled out on November 3, 2005, yet had not been signed by supervisor(s) and the RSO as of January 12, 2006.

This is also a violation of item #56 of Compliance Order #05-05-23-01, which states: "As of the effective date of this Order, ensure that individuals are appropriately trained in the provisions and requirements of approved procedures and radiation work permits.

This is a Severity Level III violation: Conduct of activities by a technically unqualified person. The penalty for this violation is \$1,250.00.

Cotter shall not allow workers to perform activities unsupervised in work areas until all training is complete, documented, and certified by at least the RSO and the Health and Safety Supervisor. **Please provide a written commitment describing changes to the training program that will ensure adequate review by management of worker training and capability.**

II. Assessment of penalties

Based on the foregoing, the Department is assessing penalties as follows:

Emergency equipment failure	Severity Level I	\$5,000
Emergency equipment failure	Severity Level I	5,000
Emergency equipment failure	Severity Level I	5,000
PPE requirements failure	Severity Level III	<u>1,250</u>
	Total Penalty	\$16,250

III. Additional Violations

- License Condition 10.1 requires that the shift supervisor shall conduct and document per the licensee's Security Manual visual surveillance of each active mill area during each shift to

evaluate site conditions, and to ensure proper implementation of the radiation protection, safety, and security programs.

Contrary to this requirement, routine inspections failed to document that showers were inoperable in portions of the grind and leach building and in the CCD wagon wheel building on December 26, 2005.

The licensee must ensure that all safety equipment is maintained and in operating condition in accordance with the requirements of the Regulations and the license. **Please provide a written response describing in detail how Cotter will address inconsistencies between the documentation and actual site conditions.**

4. License Condition 17.1 requires personal protective equipment (PPE) shall be used at all times in any area or for any activity designated by the RSO or Health and Safety Supervisor, or required when identified by routine operating procedures and/or radiation work permits to protect employees from workplace hazards. The RSO shall select, and have each affected employee use, the types of PPE that will protect the affected employee from the identified hazards. PPE shall be provided, used and maintained in sanitary and reliable condition.

Contrary to this requirement, Operational Procedures for Area 300, dated July 2005 (Grind and Leach), require basic PPE in the area, with additional PPE available, but not mandated for working with acids, caustics and/or oxidizers. During the week of December 24, 2005, operational changes were made to the leach process that changed the hazard potential for the operator of the leach circuit. The change involved heating the leach slurry to between 160 and 180 degrees F. The slurry is acidic, and contains dissolved uranium. A worker was injured on December 26, 2005 and required hospitalization for thermal and/or chemical burns. The worker in this instance apparently did not receive a radiation dose, but may well have through inhalation, ingestion, or absorption. Cotter could not provide documentation showing that increased PPE was required in this area until after the accident.

Please provide a written response describing in detail how Cotter will evaluate each work activity for its potential hazards and determine that adequate PPE is required and available.

5. License condition License Condition 13.1 states that written operating procedures shall be maintained for all routine operations and shall incorporate, at a minimum, responsibilities, operating instructions and safety precautions. These include, at a minimum, Cotter's *Radiation Protection Program Procedures*, *Site Safety Manual*, *Site Security Manual*, *Laboratory Procedures Manual*, *Site Liquids and Solid Materials Management Plan*, and the *Quality Assurance Program Plan*.

SH0009 of the Safety Manual (November 2005) has the following requirements:

B. Workplace Hazard Assessments

1. A documented *workplace hazard assessment* shall be conducted to determine if hazards are present, or are likely to be present in the work task, which necessitate the use of *personal protective equipment (PPE)*.
2. Assessments shall be updated prior to introducing new processes, before process modifications and following related accidents or incidents.
3. Workplace hazard assessments shall be reviewed and approved by the site safety professional or other competent person.
4. Review and approval shall minimally consist of a statement that includes a description of the workplace/tasks evaluated, name(s) of person(s) performing the assessment, assessment date(s) and the person reviewing the hazard assessment.

C. Application of Engineering and Administrative Controls

1. Engineering and/or administrative method controls shall be first implemented to control hazards in lieu of personal protective equipment, where feasible.

D. Specification and Communication of PPE Requirements

1. Based on the results of workplace hazard assessments, locations shall select, communicate and require the use of personal protective equipment for the protection of affected personnel.
2. Personal protection equipment shall be of safe design and construction for the work being performed.
3. To facilitate proper fitting, several different types of required PPE may be made available, as necessary.
4. PPE selection should be reviewed and approved by the site safety Department or other competent person.

Contrary to these requirements, based on a review of logs, notes, and interviews, the Workplace Hazard Assessment (B2) was not followed in a timely manner, which resulted in inadequate PPE requirements for the operation of the heated leach solution/slurry station at the time of the accident. Changes to PPE requirements were not properly documented or communicated to workers per D1. Based on the requirements of D4, management review of operational changes was inadequate.

It has been over a year since commencement of limited operations at the facility, and Cotter has yet to complete the required readiness review for the ongoing process changes. Interim changes are not being adequately evaluated and reviewed by management, and changes to PPE are not being communicated to employees. License Condition 8.2 in Amendment 42 to Radioactive Materials License 369-01, incorporated into ORDER ON CONSENT Addendum #1 to 05-08-24-01, specifies that a readiness review report shall be generated for approval by the Department.

The Department hereby orders Cotter to provide this readiness review, to include a written review and documentation of workplace hazard evaluations, documentation of operational condition of equipment (including instrumentation and controls, major pumps, seals, valves, vessels, containment), evaluation of occupational and radiation safety, and evaluation of PPE requirements, communications to workers for work activities and

adequacy of training for each work station/activity. Diagrams of the mill process shall also be provided to the Department. Each review is to be approved and signed by the Executive Vice President, Manager of Environmental Compliance, Mill Manager, Safety Manager, and RSO.

Your written responses must be submitted within thirty (30) days of receipt of this letter and must include: (1) a detailed description of the corrective actions which have been taken to achieve compliance; (2) plans to achieve compliance with the requirements which cannot be remedied within thirty (30) days; and (3) other relevant information. Any proposed compliance schedules or plans to achieve full compliance after thirty days must specifically include implementation deadlines for each of the key components of the plan. If these deadlines are not met, this will provide the Division a basis, without further notice, to institute proceedings for suspension, revocation or modification of your license, as provided in RH 3.23 of the Regulations.

As required by RH 10.2 of the Regulations, this Notice and Order must be posted so as to permit individuals engaged in licensed activities to observe it on the way to or from any particular licensed activity location to which the document applies. Any acknowledgment to this report by the licensee shall be posted within five (5) working days after dispatched by the licensee. Such documents shall remain posted for a minimum of five (5) working days or until actions correcting the violations have been completed, whichever is later.

If you have any questions concerning this letter, please contact Mr. Steve Tarlton of this Division at (303) 692-3423.

Signed,

Gary W, Baughman, Director
Hazardous Materials and Waste Management Division

CC: John Hamrick, Mill Manager, Cotter Cañon City Mill