



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VIII

999 18th STREET - SUITE 500  
DENVER, COLORADO 80202-2466

SDMS Document ID



1016966

POLLUTION REPORT  
ROCKWOOL INDUSTRIES FACILITY SITE  
CITY AND COUNTY OF PUEBLO, COLORADO

I. HEADING

Date: January 6, 1997  
From: Hays Griswold, OSC  
To: Anne Spencer, EPA Headquarters  
Emergency Response  
Subject: Rockwool Industries Facility  
City and County of Pueblo, CO  
POLREP No.: Initial POLREP

II. BACKGROUND

Site No.: 2K  
Response Authority: CERCLA  
CERCLIS No: COD073405961  
NPL Status: Not listed  
Action Memo Status: Approved - 9/16/96  
Start Date: 12/9/96  
Completion date: N/A

III. INCIDENT INFORMATION

A. Incident Category

CERCLA Time Critical, Fund-Lead

B. Preliminary Assessment Results

In 1989 this facility began developing a "closure plan" in accordance with Section 265.258(b) of the Colorado Hazardous Waste Rules. Accordingly, Site investigations and waste characterization reports were prepared by Water, Waste, and Land, Inc. (WWL) for Rockwool Industries. The results of these studies formed the basis for the Closure Plan which was finalized in December, 1992; and in 1993 the initial closure work began. However, the closure plan was not completely executed.

The Hazardous Materials and Waste Management Division of the CDPHE sent a letter (dated April 22, 1996) to Region VIII describing the present conditions and requesting assistance on this Site. It is reported that the owner spent approximately \$2,000,000 in its cleanup activities before abandoning the site. Toxicity Characteristic Leaching Procedure (TCLP) was conducted for both lead and arsenic. For both metals the test results exceeded the allowable limits of 5 milligrams per

liter (mg/l) - up to 130 mg/l. The State reports that the owner ran out of money, and it has been unable to obtain final performance of the closure plan by the company. The unfinished cap is rapidly eroding and exposing the synthetic cap. The synthetic cap will deteriorate when exposed to the weather. The OSC observed a ten-fold increase in the exposure of this cap due to the erosion from unusually intense rainfall in the timespan of two months. This removal work will repair the closure cap and complete the specific items which were recommended in the original plan of December 1992.

## C. Situation

### 1. Site Location

The Site is located at 600 Old Smelter road in Pueblo, Colorado. It encompasses a total area of approximately 49 acres in an industrial area of northeast Pueblo adjacent to Interstate Highway #25 near the confluence of Fountain Creek and the Arkansas River Channel.

An active railroad right-of-way (Atchison, Topeka, and the Santa Fe) delineates the northern boundary of the Site, while the 1921 channel of the Arkansas River forms the southern Site boundary. The western and eastern property boundaries are adjacent to Interstate Highway #25 and Smelter Hill, respectively.

### 2. Description of Threat

The waste pile from the manufacture of mineral wool insulation consists primarily of mineral wool process waste called "shot" that is contaminated with elevated levels of lead; and arsenic contamination occurs in discrete pockets. Both of these metals are hazardous substances as defined by section 101(14) of CERCLA.

It is considered likely that there is an hydraulic connection between the shot pile and the shallow underlying aquifer. As a result of the deterioration of the protective cover, there is the potential for these hazardous substances to migrate into this aquifer. Additionally, contaminated surface water could flow into the diversion and drainage ditches and into the drinking water supply for the nearby population.

The area is unsecured and anyone can venture onto the Site where there is direct exposure to hazardous materials - residences with children are immediately north of the Site. The Site shows evidence of trespassers and vagrants who have been on-site.

#### IV. RESPONSE INFORMATION

##### A. Removal Actions Completed

A closure plan was approved by the State in December, 1992. The following action items were planned for the 1993 construction season:

- Implementation of a sampling and analysis program to identify and remove arsenic bearing material exceeding the Toxicity Characteristic Leaching Procedure (TCLP) arsenic level.
- Grading of the "shot pile" to conform to the specified contours.
- Placement of a low permeability, erosion resistant, composite cover system over the regraded shot.
- Vegetation of the top surface of the cover and placement of erosion protection on the side slopes of the protective cover system.
- Construction of a surface water runoff protection system consisting of drainage and diversion ditches.
- Construction of diversion (runoff) ditches.
- Long term ground water monitoring both up and down gradient.

The items below were completed:

1. The sampling plan was implemented; the arsenic bearing material was identified; approximately 2,000 cubic yards of this material was removed and sent to the Highway #36 hazardous waste repository. There was also some boiler waste material which was treated as a hazardous material and disposed of similarly.
2. The shot pile was consolidated and graded.
3. The composite cover system, consisting of 24 inches of silty clay, was placed over the top and sides, conditioned, and compacted. Over these entire surfaces a Flexible Membrane Cover (FMC) was placed. Over this membrane and on all surfaces a 12 inch layer of gravelly sand was placed.

4. Above the gravelly sand, a geotextile membrane was installed.
5. Finally, the top layer of the composite protective system was to consist of 24 inches of amended vegetative soil on the top of the graded pile with 18 inches of a rock mulch on the sloping sides.

With the exception of the 24 inches of amended vegetative cover on the top of the pile, all of the above items were completed.

## B. Planned Actions

### 1. Proposed Action Description

EPA completed an IAG with BOR, and BOR mobilized its contractor to the Site on 12/9/96 to initiate the following actions:

- Place amended vegetative material on the top surface.
- Seed the vegetative layer.
- Install groundwater monitoring wells.
- Install perimeter security fence.
- Repair the erosional damage to the protective cover at the southeast corner.
- Placement of soil monuments.
- Removal and incorporation into the pile of some "shot" waste that remains on the far southeast corner of the property near the old river channel.

These above response actions will complete the original approved closure plan. This plan of capping and vegetating along with the diversion and runoff ditches will mitigate the potential threat to the groundwater in the underlying and adjacent aquifers.

## V. COST INFORMATION

A budget of \$1,123,600 has been established in the original Action Memorandum.