



UNITED STATES

ENVIRONMENTAL PROTECTION AGENCY

REGION III

STATEMENT OF BASIS

EAGLE PICHER AUTOMOTIVE – WOLVERINE GASKET DIVISION
(EAGLE PICHER)

BLACKSBURG, VIRGINIA

EPA ID NO. VAD 065 408 692

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I. Introduction

A. Facility Name

The United States Environmental Protection Agency (EPA) has prepared this Statement of Basis (SB) for the Eagle Picher Automotive-Wolverine Gasket Division located at 201 Industrial Park Road, Blacksburg, Virginia (hereinafter referred to as the Facility).

The Facility is subject to the Corrective Action program under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA) of 1976, and the Hazardous and Solid Waste Amendments (HSWA) of 1984, 42 U.S.C. Sections 6901 to 6992k. The Corrective Action program is designed to ensure that certain facilities subject to RCRA have investigated and cleaned up any releases of hazardous waste and hazardous constituents that have occurred at their property.

Information on the Corrective Action program as well as a fact sheet for the Facility can be found by navigating <http://www.epa.gov/reg3wcmd/correctiveaction.htm>.

EPA has prepared this SB in cooperation with the Virginia Department of Environmental Quality (VDEQ). EPA reviewed all available site data and has determined that no additional characterization or remediation is necessary for the Facility to satisfy its federal RCRA Corrective Action obligation; therefore, the facility will not be required to demonstrate financial assurance for corrective action.

B. Proposed Decision

This SB explains EPA's proposed decision that no further actions to remediate soil or groundwater contamination are necessary at this facility. EPA's proposed decision represents "Corrective Action Complete without Controls" as described in EPA Guidance found in the

This SB summarizes information that can be found in greater detail in the work plans and reports reviewed by EPA and VDEQ, which can be found in the Administrative Record (AR). The EPA's proposed decision is based on a review of the EPA's and the VDEQ's AR regarding the environmental history of the Facility, the Final RCRA Site Visit Report, dated April 25, 2006, and based upon the Environmental Indicators Determination Reports, dated August 20, 2009.

C. Importance of Public Input

Before EPA makes a final decision on its proposal for the Facility, the public may participate in the remedy selection process by reviewing this SB and documents contained in the AR for the Facility. The AR contains the complete set of reports that document Facility conditions including a map of the Facility, in support of EPA's proposed decision. EPA encourages anyone interested to review the AR. The AR is available for public review at the EPA Region III office, the address of which is provided in Section V, below.

EPA will address all significant comments received during the public comment period. If EPA determines that new information or public comments warrant a modification to the proposed decision, EPA will modify the proposed decision or select other alternatives based on such new information and/or public comments. EPA will approve its final decision in a document entitled the Final Decision and Response to Comments (FDRTC).

II. Facility Background

Eagle Picher Automotive-Wolverine Gasket Division, formerly known as Wolverine Gasket & Manufacturing Company, is located at 201 Industrial Road in Blacksburg, Virginia. The Wolverine facility property is approximately 15.1 acres in size and has an approximately 150,000 square foot manufacturing building, several small storage buildings, asphalt parking lots and roadways, and landscaped areas. The manufacturing building is divided into three segments designated Building A, B, and C. Building A was constructed in 1976, Building B in 1988, and Building C in 1980.

The Wolverine facility operates a coil coating plant and manufactures coated steel material in a coil coating process for sale or conversion by stamping processes into gaskets. Coiled steel and fiberglass basis material is coated with rubber coatings made at the facility from master batch rubber compounds and solvents. Raw solvents used in the manufacturing process primarily include toluene, di-isobutyl ketone, isobutanol, and methyl ethyl ketone. The raw solvents are stored in four large aboveground storage tanks (ASTs) and 55-gallon drums. Basis material is unwound and washed, then coated with primer and rubber coatings. After coating, the coated basis material is dried/cured in ovens. Coated material is sold as is or is slit and stamped to client specifications. Facility operations include two coating lines, a rubber make-down process, and slitting and stamping operations.

The Wolverine facility is located within the Valley and Ridge physiographic province. This province is largely dominated by sedimentary and metamorphic rocks. The facility is underlain

by the Cambrian age Elbrook Formation, which consists of sandy, fine-grained dolomite containing thin lenses of fine to medium-grained sandstone and thick ribbon-banded limestone/dolomite (USGS 1965). This formation is reported to have a thickness of 1,500 feet beneath the facility and is underlain by the lower Cambrian aged Rome Formation. No extensive unconsolidated geologic deposits overlie the bedrock of the Valley and Ridge physiographic province. Competent bedrock is present beneath the facility at depths ranging from 12 to 26 feet. Soil overlying the bedrock beneath the facility consists mainly of silty-clays and clays formed during weathering of bedrock (saprolite). The Wolverine facility is located on a topographic high, with moderate to steep slopes to the north. The facility is located approximately 2,095 feet above mean sea level.

Hydrology and Hydrogeology

The closest surface water body to the site is a tributary to Cedar Run Creek, which is located approximately 1,000 feet north of the Wolverine facility. The creek flows to the east. Several natural springs are also present in close proximity to the facility. The springs are located in a deep valley bounding the facility to the north. The springs discharge into the valley and tributary of Cedar Run Creek.

The primary aquifer beneath the Wolverine facility consists of jointed and solutioned dolomite members of the Ellbrook Formation. Recharge to this aquifer occurs primarily from the exposed upper limbs of the folded limestone/dolomite and to a lesser extent from solution and joint channels exposed to the local overburden. Groundwater is present above the soil/bedrock interface; however, the groundwater at this contact is highly variable and discontinuous. The occurrence of groundwater above the soil/bedrock interface and in shallow bedrock fractures of the upper dolomite aquifer are directly dependent on seasonal fluctuations in precipitation. Seepage from the natural springs is also directly dependent on seasonal fluctuations in precipitation. The first significant water-bearing zone within the dolomite aquifer is situated 120 to 160 feet below the facility. Groundwater within this zone exists under artesian conditions. Based on groundwater measurement data collected from several facility monitoring wells, the static water level in the shallow dolomite aquifer beneath the facility is approximately 38 to 40 feet. Groundwater flow within the shallow dolomite aquifer appears to be confined and fracture controlled. Localized flow in the shallow aquifer appears to be to the north (towards Cedar Run Creek).

III. Summary of Environmental History

As part of the Environmental Indicator (EI) inspection and evaluation for Current Human Exposures and Migration of Contaminated Groundwater, a comprehensive record search and review were conducted by the EPA and the U.S. Army Corps of Engineers (COE). This undertaking consisted of evaluating the Facility's manufacturing operations and waste management practices, RCRA permit applications, historical spills and releases, documentation of previous site inspections, RCRA closure activities and correspondence between the EPA, the Virginia Department of Environmental Quality (VDEQ) and the Facility.

In October 2005, the EPA along with the VDEQ and the COE conducted a site visit. The visit consisted of a plant tour and information gathering to assess the current status of the Facility. A

second site visit was conducted by EPA and VDEQ during August 2008. No obvious areas of concern were identified during the site visits.

Based on the comprehensive review of existing records and the site visits, EPA has determined that both EIs are under control (i.e., there is no contamination problem that creates an unacceptable risk to human health, and groundwater contamination that had existed as a result of a February 1990 toluene release has attenuated to negligible levels). Therefore, the EPA concludes that there have been no past or current releases that warrant further investigation or corrective action at the Facility at this time.

An area of concern No. 1(AOC-1) at the Facility is related with a Toluene Release Area that was formerly identified in the National Corrective Action Prioritization System, Site Assessment Report (NCAPs SAR) as SWMU-1P. This AOC refers to a release of toluene raw material that occurred from a leaking subsurface pipeline leading to the facility. The pipeline extended from a bulk aboveground storage tank (AST) to the building. Toluene and three other raw chemicals (isobutanol, di-isobutyl ketone, and methyl ethyl ketone) are stored in four steel ASTs situated near the southeast corner of the facility. The toluene, isobutanol, di-isobutyl ketone, and methyl ethyl ketone ASTs are 10,000, 3,000, 5,000, and 5,000 gallons in capacity, respectively. The tanks are situated on concrete and surrounded with concrete walls, which provides secondary containment should a release occur.

The toluene release, subsequent assessment and cleanup activities implemented to address the release were discussed and detailed in several reviewed reports (prepared by Hatcher-Sayre, Inc. and Conestoga-Rover & Associates). A release of toluene was suspected in February 1990. The release was suspected based on a discrepancy in the toluene inventory. The source of the release was suspected to be a subsurface feed line leading from the tank to the manufacturing facility. The line was immediately replaced with an aboveground feed line. In March 1990, a soil gas survey conducted near the subsurface feed line indicated the presence of high concentrations of VOCs. The release was reported to the National Response Center and Commonwealth of Virginia State Water Control Board (SWCB) within 24 hours of completing the soil gas survey. The release incident was assigned case number 90-1168 by the Commonwealth of Virginia West Central Regional Office (WCRO).

After notifying the federal and state regulatory agencies of the release, Wolverine excavated and removed the subsurface feed line. Evidence of a release was noted during removal of the feed line. During removal of the feed line, approximately 20 cubic yards of soil were stockpiled on the concrete pavement adjacent to the pipeline. The soil was stockpiled and covered with plastic sheeting and surrounded by berms. Through analytical testing the stockpiled soil was found to contain toluene and was characterized as a U-220 listed hazardous waste. In June 1990, Wolverine sent the Commonwealth of Virginia Department of Waste Management (DWM) a "Notification of Hazardous Waste Activity" notification documenting the disposal of the impacted soil. Upon notification, the DWM issued Wolverine a "Compliance Order." In July 1990, the stockpiled soil was loaded onto trucks and disposed at a hazardous waste landfill. As a result of the compliance order, Wolverine cleaned and tested the concrete areas where impacted soil was stockpiled. In December 1994, the VDEQ accepted the closure plan prepared by Wolverine for the waste pile and agreed the closure complied with applicable regulations.

During March and April 1990, soil samples were collected from the location of the excavated toluene feed line and in the vicinity of the ASTs. In addition, twelve soil test borings were advanced around the tank farm and feed line trench. Soil samples were collected from six of the test borings for analytical testing. Four post excavation soil samples were collected from the feed line trench. Toluene was detected in the post excavation and boring samples at concentrations ranging from 3 to 120,000 milligrams per kilogram (mg/kg). Toluene was detected in soil samples collected from the shallow subsurface and extended to more than 17 feet below grade. Competent bedrock was encountered in the investigated area at depths ranging from 12 to 26 feet below grade. Of the 20 subsoil samples analyzed, only one sample (120,000 mg/kg toluene at location B-5) at a depth of 17 feet, exceeded the EPA residential screening level for toluene. At a depth of 17 feet, this soil would not present a direct contact threat to human health. This soil sample was collected at a point most directly below where the actual 1/8 inch hole in the toluene feed line was discovered. Soil samples collected from a three-foot depth as you approach the concrete pad underlying the nearby storage tanks decreased in toluene concentrations to 2800 mg/kg at a sample point nearest to the concrete pad. The residential risk based concentration for toluene is 5000 mg/kg.

In November 1991, three groundwater monitoring wells were installed adjacent to the tank farm. The wells were installed within competent bedrock to depths ranging from 26 to 40 feet below grade. Groundwater samples were collected from the monitoring wells and a former facility fire protection well shortly after the monitoring wells were installed. The fire protection well is several hundred feet deep. A natural spring was identified approximately 1,200 feet north-northeast of the tank farm. A second spring was identified near the first one in February 1992. A sheen was noted on water exiting the springs. Surface water samples were collected from the springs and the tributary of Cedar Run Creek shortly after the springs were discovered. Toluene was detected in the groundwater samples collected from the monitoring wells at concentrations ranging from 11 to 120 milligrams per liter (mg/l). Toluene was detected in the groundwater sample collected from the fire protection well at a concentration of 0.001 mg/l. Toluene was detected in the water samples collected from the springs and tributary at concentrations ranging from 0.078 to 92 mg/l.

Shortly after discovering the first spring, water exiting the spring was diverted through a biological treatment unit (an out-of-service City of Blacksburg POTW, with city approval) as an emergency measure. The emergency measure was approved by the SWCB. Three more springs were identified downgradient of the facility at a later date. All of the springs discharged to the tributary of Cedar Run Creek. Water exiting all of the springs was diverted to the previously mentioned POTW.

Monitoring of groundwater and treatment of water exiting the springs was conducted until June 2004. In August 2004, Wolverine requested case closure from the VDEQ. Case closure was granted by the WCRO in September 2004. At the time of closure, toluene in groundwater in the monitoring wells had decreased to concentrations ranging from 0.0003 to 0.0049 mg/l, and in the fire protection well to below the analytical method detection limit (less than 0.001 mg/l), and in surface water in the springs to below the analytical method detection limit (less than 0.005 mg/l). The EPA Maximum Contaminant Level (MCL) for toluene of 1.0 mg/l was achieved. The monitoring wells were closed or (abandoned) in accordance with Virginia's regulatory requirements shortly after case closure of the case was granted by the VDEQ.

In summary, the groundwater quality at the facility site and in the offsite springs or seeps have

sufficiently recovered by natural attenuation processes to meet the EPA's MCLs and the DEQ's Surface Water Quality Standard for toluene. Therefore, the site has met the water quality clean-up criteria and standards under RCRA Corrective Action and there is no further action deemed necessary for groundwater remediation at the facility. Furthermore, the fact that toluene concentrations in groundwater have decreased to levels below clean-up standards would tend to indicate that toluene concentrations in soil have been reduced through natural attenuation.

As a result of the investigations and remedial actions taken, the EPA believes that there is no need for further Corrective Actions at this facility.

IV. Evaluation of EPA's Proposed Decision

EPA has determined that its proposed decision for the Facility is protective of human health and the environment and that no further corrective action or controls are necessary at this time.

V. Public Participation

Interested persons are invited to comment on EPA's proposed decision. The public comment period will last thirty (30) calendar days from the date that notice is published in a local newspaper. Comments may be submitted by mail, fax, e-mail, or phone to Mr. Bill Wentworth at the address listed below.

A public meeting will be held upon request. Requests for a public meeting should be made to Mr. Bill Wentworth at the address listed below. A meeting will not be scheduled unless one is requested.

The Administrative Record contains all the information considered by EPA for the proposed decision at this Facility. The Administrative Record is available at the following location:

U.S. Environmental Protection Agency
Region III
1650 Arch Street - 3WC23
Philadelphia, PA 19103-2029
Contact: Bill Wentworth Voice: (215) 814-3184
Fax: (215) 814-3113
Hours: Mon-Fri, 9:00 A.M - 5:00 P.M.
E-mail: wentworth.william@epa.gov

Following the thirty (30) calendar day public comment period, the EPA will prepare a final decision which will address all written comments and any substantive comments presented verbally at a public meeting. This final decision will be incorporated into the Administrative Record. If the comments are such that significant changes are made to the Corrective Action Complete decision, EPA will seek public comments on the revised proposal.

