

STATEMENT OF BASIS

Former Allied Signal Fibers Plant Hopewell, Virginia

EPA ID No. VAD 003112588

I. Introduction

This Statement of Basis is for the Former Allied Signal Fibers Plant (Allied Signal), located in Hopewell, Virginia. The plant, located at 105 Winston Churchill Drive, was closed in early 2000 as part of the merger between Honeywell and Allied Signal. Allied Signal was renamed Honeywell International Inc. at the time of the merger.

Allied Signal purchased the plant in 1995 from Bridgestone/Firestone, Inc. At that time, the plant was called Firestone Fibers and Textile Plant. Firestone Tire and Rubber (Firestone) had built the plant in the early 1970's, and started manufacturing in 1972. Bridgestone purchased Firestone Tire and Rubber in 1988, and changed their corporate name to Bridgestone/Firestone, Inc. For complete history of the site, see "Facility Background," Section II, below.

After reviewing the results of recent investigations and past historical investigations, the United States Environmental Protection Agency (EPA) believes that no further corrective action is necessary at Allied Signal at this time, and is proposing a final decision of Corrective Action Complete With Controls. This proposal is consistent with current EPA guidance entitled *Final Guidance on Completion of Corrective Action at RCRA Facilities* (February 25, 2003). The purpose of this document is to solicit public comment on the proposal that corrective action is complete with controls. Those controls include long term groundwater monitoring and restriction on groundwater use at the site.

The Allied Signal facility is subject to the Corrective Action Program under the Resource Conservation and Recovery Act (RCRA). (For more information on RCRA Corrective Action, please visit the Region III web site at www.epa.gov/reg3wcmd/correctiveaction.htm). The Corrective Action program is designed to ensure that facilities have investigated and cleaned up any releases of hazardous waste or constituents that may have occurred at their property. Region III is using the administrative procedures found in 40 CFR Part 270 to solicit public comment prior to making its final corrective action decision for the Allied Signal facility.

II. Facility Background

Firestone owned and operated a nylon plant on 52 acres at 115 South Main Street, Hopewell, Virginia from 1959 thru 1989. This property is known as the Exeter site and was investigated under the EPA Superfund program. Directly east of the Exeter site, across the railroad tracks was an additional property, around 37 acres that was largely unused by Firestone. In the early 1970's, Firestone decided to build a manufacturing plant on the 37 acre parcel to produce polyester fibers. Firestone operated the polyester plant from 1972 until 1995. In 1990, Firestone sold off a portion of the 37 acres, approximately 13 acres north of the plant to Ultra Cogen Systems. In 1991, Ultra Cogen built a cogeneration plant on the property.

In 1995, the polyester plant property was sold to Allied Signal, and Firestone leased back a small area called the F-62 process area, which it continued to operate through approximately June 1999. Allied Signal operated the plant from the time of the property transaction in 1995 to early 2000, when Allied Signal merged with Honeywell and plant operations were discontinued.

In the summer of 1999, EPA identified Allied Signal as a high priority unaddressed facility on its Government Performance and Results Act (GPRA) baseline. (For more information on the Government Performance and Results Act, please visit the Region III web site at www.epa.gov/reg3wcmd/correctiveaction.htm).

III. Early Investigations

The first investigation of the Firestone 37 acre parcel came about in 1989 with the planned sale of 13 acres to Ultra Cogen Systems (later became Hadson Power). Ultra Cogen Systems hired a consultant (Froehling & Robertson, Inc.) to perform soil and groundwater sampling activities on the northern portion of the parcel as part of its due diligence in connection with its purchase of the parcel. The analytical results indicated the presence of lead at concentrations exceeding background, including results that exhibited the hazardous waste characteristics of toxicity as determined by EP-toxicity methods, on several locations on the Hadson parcel. Firestone retained Woodward-Clyde Consultants (WCC) to develop and implement a site restoration plan. The site plan was approved by Ultra Cogen Systems and Firestone, and was implemented in September 1989.

Extensive soil sampling was performed both horizontally and vertically to define the contaminated areas. Removed soil was stockpiled on plastic sheeting before being sent offsite for disposal. (This stockpile area eventually went thru closure with Virginia Department of Environmental Quality (VDEQ)) Approximately 550 tons of soil was removed. Replacement fill was brought in to bring the area back to grade.

With the discovery of lead in soil by Ultra Cogen System's consultant, two groundwater wells were placed in the area of soil contamination. Both wells were sampled twice, and on both occasions the dissolved lead concentration was below the method detection level of 20 ug/l. As a result, the wells were properly destroyed during the soil excavation. Four additional groundwater wells were installed around the 13 acre site to monitor organic contamination. Two of the four wells showed evidence of chlorinated solvents.

Additional wells were installed between 1990 and 1993 to monitor and understand groundwater conditions at the site. Low levels of chlorinated solvents continued to appear in wells at the site. In 1995, a consultant, O'Brien and Gere performed soil sampling activities on behalf of Firestone and Allied Signal during a baseline study of the property related to the purchase by Allied Signal. Soil sample results indicated that lead levels were within the background concentrations and low levels of volatiles and semi-volatiles found were below EPA Region III risk-based concentrations.

IV. EPA Corrective Action Investigation

On March 31, 1999, EPA sent a letter to Firestone requesting groundwater data and any prior studies conducted at the site in order to answer the Environmental Indicators (EIs) as required by GPRA. Firestone submitted historical data to EPA on June 30, 1999, and again on October 26, 1999. Even though Allied Signal owned the property, Firestone was the lead on past environmental issues at the site.

After reviewing the historical data, EPA requested additional groundwater data across the entire site, including the Ultra Cogen (Hadson Power) parcel, to determine groundwater flow direction and the extent of the chlorinated plume. In February 2000, EPA met with representatives of Bridgestone/Firestone, to discuss the information needed to full fill the Environmental Indicators. In April 2000, Bridgestone/Firestone voluntarily submitted a "Focused Groundwater Investigation Workplan to EPA. Actual field work was conducted in August/September 2000. The results of the investigation were presented to EPA in January 2001 in the "Focused Groundwater Investigation Report and Environmental Indicator Analysis". The report indicated that the recent groundwater sampling results were consistent with historical data. That is, the highest concentrations were reported at well ASMW-01, which is located at center of property, and that natural attenuation factors are at work at the site. Well ASMW-01 had a concentration of 210 ppb of 1,1- Dichloroethene, which exceeded the Maximum Concentration Level (MCL) of 7 ppb. Trichloroethene was detected at 9.7 ppb, which exceeded the MCL of 5 ppb.

Following EPA review of the January 2001 Report, EPA required additional investigation to further evaluate soil as a potential source of the chlorinated volatile

organic compounds detected in groundwater samples at certain groundwater wells at the Facility. Bridgestone /Firestone agreed to conduct a focused soil investigation after consultation with EPA. A Soil Assessment Workplan was submitted in March 2002. EPA did not agree with Bridgestone/Firestone's approach to the soil investigation as outlined in the Soil Assessment Workplan.

In July 2002, EPA requested the current owner of the property, Honeywell, to address EPA's concerns. In April 2003, EPA, Honeywell and Bridgestone Firestone agreed to conduct corrective action thru the Facility Lead Program.

In June 2003, Bridgestone/Firestone (with Honeywell concurrence) submitted a Soil Gas Survey Workplan to address locating the source of the chlorinated solvent contamination in groundwater. Two potential source areas were selected based on reviews of historical Sanborn Fire insurance Maps and aerial photographs. The proposed workplan was approved in August 2003, with actual field work in October 2003. Bridgestone/Firestone also collected another round of groundwater samples during the field event.

In February 2004, Bridgestone/Firestone (with Honeywell concurrence) submitted the "Soil Gas Survey and Groundwater Sampling Summary Report". The results of the Soil Gas Survey demonstrated that no significant source remained in the soils. The results of the groundwater sampling indicated that the levels were stable or decreasing.

In March 2004, Bridgestone/Firestone (with Honeywell concurrence) submitted a "Groundwater Assessment Scope of Work" to EPA, which addressed the recommendations of the Soil Gas Survey and Groundwater Sampling Summary Report (Feb. 2004). Those recommendations included: installation of temporary groundwater sampling points, abandonment and replacement of well ASMW-05; installation of a permanent, hydraulically downgradient monitoring well; abandonment of wells no longer used for monitoring; and collection and analysis of groundwater samples from the facility's monitoring wells. EPA required this additional work to ensure that the groundwater plume was completely encompassed with monitoring wells, and that the groundwater plume hadn't migrated off the facility boundary.

Field work was conducted in late March and again in May 2004. Results were summarized in a report entitled "Groundwater Assessment Report and Environmental Indicator Analysis", submitted in August 2004. Following review of the Report, EPA requested additional sampling of the groundwater wells for 1,4-dioxane, which was a constituent associated with early solvents. The groundwater wells were sampled in December 2004 for 1,4-dioxane.

The revised "Groundwater Assessment Report and Environmental Indicator Analysis" was resubmitted on June 27, 2005. This is the final report, including the

1,4-dioxane sampling and the review comments provided by EPA in November 2004. A summary of the report is provided in "Section V".

V. Results

The Groundwater Assessment Report dated June 2005, summarizes previous investigations and provides the final analytical results from the May 2004 groundwater sampling event and the 1,4-dioxane sampling event in Nov. 2004. While groundwater contamination was detected in the early investigations at the site, a source for that groundwater contamination was not investigated fully until 2003. Using a Soil Gas Survey method, two large areas were investigated. Results of the Soil Gas Survey demonstrated that no significant source remained in the soils. This left only groundwater to be further defined and characterized.

The analytical results of the samples collected during the investigation were compared to EPA's screening values for identification of contaminants of potential concern. Contaminants of potential concern are defined as analytes that either exceed the screening levels established for the facility, or have non-risk related attributes that necessitate their inclusion in a human health risk assessment.

Analytical results for soils were compared to USEPA Region III residential soil Risk Based Concentrations (RBCs), including soil to groundwater migration. Results for soils indicated no exceedances of the above standards.

Groundwater results were compared to USEPA Region III tap water RBCs and Federally promulgated Maximum Contaminant Levels (MCLs). The May 2004 groundwater results continue to show that well ASMW-01 has the highest concentrations, but those concentrations have decreased since 1993. The two prominent constituents found in well ASMW-01 and most wells are 1,1- Dichloroethene and 1,1-Dichloroethane. For well ASMW-01, the concentration was 72 ppb of 1,1- Dichloroethene, which exceeded the MCL of 7 ppb. This concentration was down from 210 ppb from a sampling event done in August 2000. For well ASMW-01, the concentration was 57 ppb 1,1- Dichloroethane, which did not exceed the RBC of 80ppb. This concentration was down from 190 ppb from a sampling event in August 2000.

The May 2004 analytical results from hydraulically downgradient wells ASMW-06 and ASMW-07 along the perimeter of the property show that the plume has not migrated off the property boundary and that the levels are below MCLs or RBCs.

The November 2004 groundwater analytical results for 1,4-dioxane indicated that there is an offsite source coming from the former Exeter site. The highest concentration

was found in well ASMW-03, located near the property boundary with Exeter. The down gradient wells ASMW-06 and ASMW-07 did not detect 1,4-dioxane.

VI. Conclusion

The analytical data collected at the facility site since 1995 provides sufficient evidence that the groundwater plume emanating from the site is stable and has decreased in magnitude. Natural attenuation factors are contributing to this decrease in concentration levels.

Groundwater is not used at this site for drinking or for any manufacturing process. Information collected from Virginia Department of Environmental Quality (VDEQ), the Prince George County Health Department, and the City of Hopewell Health Department showed the closest water supply was 2 miles to the southeast, and is used for industrial supply by the Paper Chemicals Company.

EPA believes that it is appropriate to make a Corrective Action Complete with Controls determination at this facility. EPA's proposed remedy consists of continued monitoring of groundwater and the restriction of groundwater use at the site by institutional controls.

VII. Public Participation

EPA is requesting comments from the public on its tentative decision of Corrective Action Complete with Controls. The public comment period will last forty-five (45) calendar days from the date that this matter is publicly noticed in a local newspaper (February 22, 2006 to April 7, 2006). Comments should be sent to EPA in writing at the EPA address listed below, and all commenter's will receive a copy of the final decision and a copy of the response to comments.

A public meeting will be held upon request. Requests for a public meeting should be directed to Mr. Michael Jacobi of the EPA Regional Office at the address below or at (215) 814-3435.

The Administrative Record contains all information considered by EPA when making this proposal. 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: Mr. Michael Jacobi

Voice: (215) 814-3435
Fax: (215) 814-3113
Hours: Monday - Friday, 8:00 A.M - 5:00 P.M.
E-mail: jacobi.mike@epa.gov

Following the forty-five (45) calendar day public comment period, 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 this proposal, EPA will seek public comments on the revised proposal.