NEW YORK STATE
DEPARTMENT OF

ENVIRONMENTAL
CONSERVATION

Final Remedial Investigation Report available for review at the Rensselaer Public Library 810 Broadway Rensselaer, NY

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The New York State Department of Environmental Conservation has made the final Remedial Investigation Report for the BASF Manufacturing Plant Site available for public review.

FACT SHEET

April 2002

BASF MANUF. PLANT, #442027
36 Riverside Ave., Rensselaer, NY
NYSDEC, Region 4, Rensselaer Co.

Remedial Investigation Report Available for BASF Manufacturing Plant Site - #442027

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The completion of a Remedial Investigation (RI) at the BASF Manufacturing Plant has found process sludges and contaminated soils that are the sources of groundwater contamination. As a result, remedial measures are needed to address sources of the contamination and to treat the groundwater. Any questions regarding the RI should be addressed to Mr. Daniel Lightsey (at the address below).

What Happens Next: A Feasibility Study (FS) will use the RI information to develop alternative remedial actions that will eliminate (to the extent feasible) the threat to public health or the environment posed by the site. Wherever feasible, the state selects a remedy, such as destruction, that permanently reduces or eliminates the contamination.

BASF and the New York State Department of Environmental Conservation (NYSDEC) screen each alternative to make sure the remedy is technically suitable for the site. Following the initial screening, the NYSDEC and New York State Department of Health (NYSDOH) weigh the remaining alternatives against a number of conditions, including:

- Overall protection of public health and the environment;
- Compliance with statutory requirements;
- Reduction in toxicity, mobility and volume of hazardous waste;
- Long-term effectiveness and permanence;
- Short-term effectiveness and potential impacts during remediation;
- Implementation and technical reliability;
- Cost; and
- Community acceptance

Document Repositories: To review the Remedial Investigation and other site information, a repository has been established at the Rensselaer Public Library, 810 Broadway, Rensselaer, NY 12144. Their telephone number is (518) 462-1193.

For More Information: Call or write the following staff for more information:

Remedial Investigation Comments:
Mr. Daniel Lightsey
NYSDEC, Div. Env. Remediation
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(518)357-2374

Health-Related Concerns:
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REMEDIAL INVESTIGATION REPORT

Site Description

The BASF facility is located in an industrial area of the City of Rensselaer, Rensselaer County. The facility consists of approximately 80 acres separated into three areas; the Manufacturing Plant (site #442027), the South 40 (site #442022), and the capped 5-acre landfill (site #442004). Each of these three areas are listed separately in the NYS Registry of Inactive Hazardous Waste Disposal Sites. The RI was completed under a 1998 Order on Consent between BASF and NYS which requires an RI and FS at the Manufacturing Plant Site (the Main Plant and the two lagoons).

The Main Plant currently contains 18 buildings that include production buildings, maintenance shops, laboratories, warehouses, offices, and above ground storage farms. Those areas not covered by asphalt are covered by gravel. The site functioned as a production facility for colorants and dyes until it closed its operations in December of 2000.

The site is bordered on the north by Organichem, on the southwest by a power plant, on the southeast by the South 40 site, on the east by railroad tracks and an elevated highway, and on the west by the Hudson River.

Site History

1881 is the first year of use of the facility that is currently the BASF manufacturing plant in Rensselaer. The company began its operations in building 61, which was used until the facility closed in December 2000.

The facility began to supplement its dyestuffs with pharmaceuticals and aspirin in 1905. The facility was seized by the United States government during both world wars, and functioned as part of the war economy. In 1968, the company became the GAF Corporation; and in 1978 BASF purchased the manufacturing plant from GAF Corporation.

The manufacturing plant site is listed in the NYS Registry of Inactive Hazardous Waste Disposal Sites as site #442027.

Summary of the Remedial Investigation Report

The Remedial Investigation (RI) consists of three phases of investigation, contained in two reports. The RI and Supplemental RI were conducted from April 1999 to July 2000 (the first report). The Additional RI Activities were performed from February 2001 to May 2001 (the second report).

At least one interim remedial measure (IRM) is being considered at this Site. An IRM is a discrete set of planned actions that can be conducted prior to choosing the final remedy. An IRM is designed to be a permanent part of the final remedy. If an IRM is likely, there will be a public availability session to describe the IRM work plan in detail.

REMEDIAL INVESTIGATION REPORT

Highlights of the RI include:

- Most of the site is paved or covered by buildings, thereby limiting the formation of drainage pathways. Storm water collects in storm sewers which discharge to the wastewater treatment lagoons.
- Across most of the site, a silt and clay layer exists at about 12 feet below the surface which ranges in thickness from nine feet (on the eastern side) to fifty five feet (on the western side). This silt and clay layer separates the lower aquifer from the upper aquifer.
- No contamination was found in the lower aquifer.
- Groundwater flow was determined to be generally to the west. However, buried sewers and sewer bedding cause changes to the west- ward flow of the groundwater.
- Twenty-one metals and cyanide were detected in the soils above NYSDEC recommended soil clean-up objectives (RSCOs) at the Main Plant site.
- Seven volatile organic compounds (VOCs) were detected in the soils above NYSDEC RSCOs.
- Ten semi-volatile organic compounds (SVOCs) were detected in the soils above NYSDEC RSCOs.
- Groundwater beneath the Main Plant is characterized as having low dissolved oxygen and a neutral to acidic pH.
- Eleven metals were detected in the groundwater above NYS ambient water quality standards (AWQSs) in filtered groundwater beneath the Main Plant and Lagoon Areas.
- Thirteen VOCs were detected in the groundwater above NYS AWQSs in filtered groundwater beneath the Main Plant and Lagoon Areas.
- Fifteen SVOCs were detected in the groundwater above NYS AWQSs in filtered groundwater beneath the Main Plant and Lagoon Areas.
- The primary contaminants of concern (COCs) are: Arsenic, Chromium, Benzene, Toluene, Chlorobenzene, 1,2-Dichloroethane, Ethyl-benzene, total Xylenes, 1,2-Dichlorobenzene, 1,4-Dichlorobenzene, 1,2,4 Trichlorobenzene, and Phenol.
- Hexavalent chromium was detected in one unfiltered groundwater sample beneath the Lagoon area above NYS AWQSs. Hexavalent chromium was not detected in the filtered samples.
- Four source areas are impacting the ground-water beneath the Main Plant.
- Most of the impacted groundwater from beneath the former drum storage area is flowing north and west, while some portion of the impacted groundwater is flowing south along the sewer bedding beneath the closed landfill.
- Impacted groundwater from the sewer bedding along the City of Rensselaer sanitary sewer is infiltrating into the storm and sanitary sewers.