

General Motors (Central Foundry Division)

New York

EPA ID#: NYD091972554

EPA REGION 2

Congressional District(s): 24

St. Lawrence

Massena

NPL LISTING HISTORY

Proposed Date: 9/1/1983

Final Date: 9/1/1984

Site Description

The 270-acre site is bordered by the St. Lawrence River to the north, the St. Regis Mohawk Nation to the east, the Raquette River to the south, and property owned by Alcoa and Conrail to the west. There are approximately 4,000 St. Regis Mohawks living in the adjacent territory referred to as Akwesasne. The City of Cornwall, Ontario, with approximately 50,000 residents, is located approximately 2 miles north across the river and the Village of Massena, with a population of 11,000, is located approximately 7 miles to the east.

The facility was originally built to produce aluminum cylinder heads for the Chevrolet Corvair and has been in operation since 1959. Until 1980, the plant used polychlorinated biphenyls (PCBs) as a component of the hydraulic fluids in its die casting process. Although General Motors no longer uses die casting in its processes, it continues to manufacture engine blocks at the Massena plant.

The site consists of several discrete areas—a twelve-acre Industrial Landfill, the North Disposal Area, the East Disposal Area, four industrial lagoons, the St. Lawrence River, the Raquette River, on-site soils, and Tribal soils and sediments. PCBs are the primary contaminant of concern. The groundwater beneath the site is contaminated with PCBs and volatile organic compounds.

Site Responsibility: The site is being addressed through potentially responsible party-performed actions. GM recently announced plans to discontinue manufacturing operations at the Massena Plant by the end of 2008. The plant's closing will have no impact on the cleanup progress or GM's responsibilities for the remediation of the Site.

Threat and Contaminants

PCBs have been found in the groundwater, on- and off-site soils, and sediments in the St. Lawrence and Raquette Rivers, Turtle Cove, and Turtle Creek. Volatile organic compounds are present in the groundwater. Phenols have been detected in lagoon sludges, as well as in the disposal areas. The consumption of fish or wildlife from contaminated areas is of special concern because of the proximity of the Mohawk Tribal lands. Fishing remains restricted by the New York State Department of Health and the St. Regis Mohawk Tribe. Individuals ingesting fish from the St. Lawrence River or ingesting or coming in contact with contaminated surface water, groundwater, soil, sludges, or sediments are potentially at risk. Public water supply systems are not contaminated.

Cleanup Approach

This site is being addressed in three stages: immediate actions and two long-term remedial phases.

Response Action Status

Immediate Actions: General Motors (GM), under EPA's oversight, placed a cap on the Industrial Landfill in 1987 to prevent the migration of contaminants from the landfill.

River Sediments, Lagoons, Soils, and Groundwater: The remedy that was selected by EPA in a December 1990 Record of Decision (ROD) includes dredging and excavating contaminated materials, followed by on-site treatment and disposal of residual contamination and groundwater extraction and treatment. This decision was later amended to allow for off-site disposal, rather than on-site treatment of certain remediation wastes.

GM completed dredging of PCB-contaminated St. Lawrence River sediments in the Fall of 1995. Since cleanup goals

were not reached in all targeted areas, a multilayer cap was placed over those sediments. The dredged sediments were shipped by rail to a hazardous waste disposal facility.

From July 2000 through August 2004, remediation of the two inactive lagoons at the facility took place. Contaminated sludges and soils surrounding a 1.5-million gallon lagoon and a 350,000-gallon lagoon were excavated, stabilized, and shipped to an off-site disposal facility.

In August 2002, GM began remediating the Raquette River bank soils and sediments. This work was completed in September 2003, with GM successfully meeting the cleanup goals of 10 milligrams per kilogram (mg/kg) PCBs for soils and 1 mg/kg PCBs for sediments.

In the Fall of 2003, GM completed the removal of contaminated soils at the toe of the slope of the Industrial Landfill.

In October 2004, GM began the remediation of Turtle Cove, which included the dredging of the cove and the excavation of contaminated soils on the adjacent Tribal property. These areas were subject to the Tribal remediation standards of 0.1 mg/kg PCBs for sediments and 1 mg/kg PCBs for soils. This work was completed in March 2005. It is anticipated that the cleanup of the soils on another Tribal property will take place in the Summer of 2007. When this work is completed, two of three Tribal properties will have been remediated. The one remaining Tribal property cannot be remediated until the property owners provide access to it.

The groundwater remediation design is currently underway. An additional 18 groundwater wells were installed in 2006 and are being sampled on a quarterly basis. It is anticipated that the remedial design will be revised in late 2007 using the new groundwater data.

Industrial Landfill and East Disposal Area: The remedy that was selected by EPA in 1992 for the Industrial Landfill and East Disposal Area includes excavating highly-contaminated materials from the East Disposal Area, followed by on-site treatment and disposal of residual contamination, capping the Industrial Landfill and less contaminated materials in the East Disposal Area, and groundwater containment. GM began the engineering design of this remedy in the Summer of 1992. There is strong public opposition to the containment remedy. Discussions with the Tribe, the community, and GM continue.

Site Facts: EPA and GM negotiated a Consent Order in 1985, requiring GM to conduct an investigation into the nature and extent of contamination at the site. In March 1992, EPA issued a Unilateral Administrative Order to GM requiring it to undertake the design and implementation of the final remedy for the North Disposal Area, river sediments, lagoons, soils, and groundwater. In August 1992, EPA issued a second Unilateral Administrative Order to GM requiring it to undertake the design and implementation of the final remedy for the East Disposal Area and Industrial Landfill.

In 1994, in response to a request by GM that EPA re-evaluate the amount of treatment required for the North Disposal Area, river sediments, lagoons, and soils, EPA reviewed data provided by GM to determine whether material in these areas could be contained, rather than treated. As a result of this review, in July 1995, EPA released a Proposed Plan which proposed a change in the treatment threshold for the excavated PCB-contaminated soils and sediments. Due to public opposition, EPA later withdrew that Proposed Plan, and in September 1998 issued a revised Proposed Plan to allow for off-site disposal rather than treatment of these materials. That proposal, which was supported by the public, Tribe, and NYSDEC was formalized in a ROD amendment in March 1999. An Explanation of Significant Differences was issued in April 2000 allowing for the off-site disposal of certain materials after on-site treatment via stabilization, rather than thermal desorption. A Five Year Review was conducted in 2005.

Five-year reviews are undertaken at sites to ensure that implemented remedies protect public health and the environment and that they function as intended by site decision documents. In July 2005, EPA issued a Five-Year Review report, which concluded that the implemented actions at the site protect human health and the environment in the short-term. The five-year review also concluded that the remedy will be fully protective once the remaining remedial measures called for in the RODs are implemented. EPA will conduct another five-year review on or before July 2010.

Cleanup Progress

By capping the 297,000 tons of PCB-contaminated wastes in the Industrial Landfill, the potential for further contamination of the site and risk from exposure to hazardous materials has been reduced while additional cleanup activities are being implemented.

By dredging approximately 23,000 tons of PCB-contaminated sediments from the St. Lawrence River system (including 16,900 cubic yards of contaminated soils and sediments from Turtle cove and the surrounding area), the potential for continued contamination of edible fish and wildlife is reduced. The removal of 27,447 tons contaminated sludges and soil from the on-site lagoons and 7,800 tons of PCB-contaminated materials from the toe of the slope of the Industrial Landfill has also further reduced the potential for exposure to contaminants.

The clean up of Turtle Cove, upland soils, and the Raquette River has significantly reduced the potential for exposure to nearby residents.

Site Repositories

St. Regis Mohawk Tribe, Community Building, Akwesasne, NY 13655

Massena Public Library, 41 Glen Street, Massena, NY 13662

EPA Region 2 Superfund Records Center, 290 Broadway, 18th Floor, New York, NY 10007-1866