

Fact Sheet, June 2021



Facility Location and Operation

The Loveland Products, Inc. (LPI) facility occupies 27 acres in Yellowstone County, East of the city limits of Billings, Montana in the area known as Lockwood. The site is currently zoned heavy industrial.

LPI (formerly known as Transbas) operated an herbicide manufacturing and formulation plant at the facility from 1975 to 2020. Herbicide formulation included blending or reacting herbicides with alcohols, solvents, amines, or water to produce commercial herbicide products. Herbicides formulated at the facility were primarily dichlorophenoxyacetic acid (2,4-D); 2-methyl-4-chlorophenoxyacetic acid (MCPA); 2-(2-methyl-4-chlorophenoxy)propionic acid (MCPP); 3,6-dichloro-2-methoxybenzoic acid (Dicamba); N-(phosphonomethyl)glycine (Glyphosate); and 4-Amino-3,5-dichloro-6-fluoro-2-pyridinyl oxy acetic acid (Fluroxypyr).

Current use of the facility is herbicide product transloading and storage.

Hazardous Waste Permit

The Montana Hazardous Waste Act (MHWA), the state equivalent of the Federal law Resource Conservation and Recovery Act (RCRA), regulates the management, treatment, storage, and disposal of hazardous waste. Facilities that are or have managed hazardous waste in specific ways must obtain a hazardous waste permit, as required by MHWA. The LPI facility was issued a hazardous waste permit in 1995. In 2015, the hazardous waste permit was replaced with a Corrective Action Order on Consent, which is equivalent to a permit.

Hazardous Waste Treatment

Between 1979 and 1985, 2,4-D contaminated wastewater produced from the herbicide's formulation and manufacturing process was discharged to three surface impoundments on-site to allow evaporation of the

water and concentration of the sludge. In 1987 LPI closed the surface impoundments by removing standing liquid, stabilizing the bottom sludge with lime and fly ash, and capping the impoundments with a polyethylene liner, sand, and compacted gravel. An asphalt cap was added to the cover in 1991.

In 2012, LPI excavated the solidified sludge, lime, and fly ash, and any contaminated surrounding soil, and placed it in an off-site hazardous waste permitted landfill. The excavation was then backfilled with clean soil and a warehouse was built over the area.

Corrective Action Program

Corrective action is the investigation and remediation process at hazardous waste sites. The mandate for corrective action is contained in federal and state regulations under RCRA.

Remedial investigations at the LPI site began in 1990 when EPA conducted an assessment of the facility and found areas of potential contamination in soil, subsurface soil and groundwater. LPI conducted several investigations between 1996 and 2005 to identify the nature and extent of the contamination. Screening level human health and ecological risk assessments were also completed. Areas of the site where contaminants exceed cleanup levels were identified during the investigation and risk assessments.

Site-Wide Remedial Action

DEQ made a facility-wide remedial decision for the soil in 2008 and the groundwater in 2014. The following cleanup remedies were included in DEQ’s remedial decision:

Cleanup Remedy	General Description	Current Status
Excavation	Contaminated soil in the subsurface was excavated and disposed at an off-site hazardous waste landfill.	Excavation of contaminated soil was complete in 2011.
Localized Enhanced Bioremediation	A groundwater well is equipped with a pump to inject oxygen into the subsurface to aerate the environment surrounding the well and enhance biodegradation of contaminants.	Localized enhanced bioremediation was implemented with an iSOC® system from 2017 to 2020.
Environmental Control Easement	Restricts certain activities to ensure safety of human health and the environment through reduction in exposure to contamination.	An Environmental Control Easement was filed with Yellowstone County in 2019. The Easement includes restrictions on: drilling wells for groundwater, use of groundwater, monitoring wells, and use of the land surface.
Monitored Natural Attenuation	Relies on natural processes to decrease concentrations of contaminants from soil or groundwater. Monitoring involves regularly assessing the contaminants and soil or groundwater characteristics to ensure proper attenuation is occurring.	Twelve monitoring well throughout the site are sampled and analyzed for monitored natural attenuation conditions semi-annually.

LPI is also required to investigate and implement cleanup measures, as necessary, if new areas of contamination or releases are discovered.

Public Involvement

Throughout the permitting and cleanup process, DEQ will keep the public informed through notices of public meetings and public comment periods. Notices are published in local newspapers and are also sent to anyone on DEQ's interested parties list. If you would like to be included on the interested parties list, please contact the project manager provided below.



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About Us

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