

FEBRUARY 2025

Status of BASF Site Clean Up

36 Taunton Street, Plainville, MA

BASF Corporation (BASF) received approval from the U.S. Environmental Protection Agency (EPA), the Town of Plainville's Conservation Commission, and the Board of Health and has completed the removal and/or capping of soils containing polychlorinated biphenyls (PCBs) and heavy metals, (inc. Cadmium) that were present above regulatory action levels at the BASF site located at 36 Taunton Street in Plainville MA.

Remedial investigations were initially conducted in response to a September 1993 Consent Order applied under the EPA Resource Conservation and Recovery Act (RCRA) Corrective Action program, 40 CFR 260-270, which originally focused on chlorinated volatile organic chemicals (CVOCs) and metals. BASF received approval from EPA on June 25, 2021, to implement a Soil Risk Based Disposal Plan (RBDP) aimed at bringing environmentally impacted soils to a condition that no longer poses a risk to public health. This condition was achieved by removing and disposing of highly impacted soils at a licensed off-site landfill and capping the remaining soils where necessary to prevent exposure and infiltration of precipitation, thereby limiting the transport and leaching of residual, low-level PCBs, and heavy metals into underlying groundwater. In conducting this work, the requirements of the Toxic Substance Control Act (TSCA), 40 CFR 761 were also achieved.

Local and state permitting requirements were also satisfied. A Notice of Intent (NOI) detailing the planned soil excavation and restoration work was submitted to the Town of Plainville Conservation Commission (ConCom) and approved on September 29, 2021. This NOI outlined the procedures and demonstrated compliance with ConCom and Massachusetts Department of Environmental Protection (MassDEP) stormwater and water quality regulations for proposed remedial activities within the excavation areas, as well as in wetland and lake buffer zones.



The remedial approach for soil combined the advantages of several different technologies and included:

1. removal and off-site disposal of high-concentration (>100 ppm) PCB soils;
2. placing an Engineered Barrier consisting of a multi-layer, impermeable, clay-type cap over high-level (> 1,000 ppm) cadmium impacted soils
3. covering low-level soils with PCBs (>25 <100 ppm) “with 6 inches of asphalt

Both the Final Cover and Engineered Barriers will:

1. prevent direct contact with the soil which will have residual, regulatorily compliant levels of PCBs and metals.
2. minimize infiltration of precipitation so that residual chemicals will not leach into underlying groundwater. Drainage swales were constructed around the Final Cover and Engineered Barriers, along with erosion controls such as check dams were provided to ensure runoff and erosion does not occur in quantities and velocity exceeding MassDEP stormwater guidelines. The Engineered Barriers and drainage swales received topsoil and were seeded with vegetation to support native wildlife.

An Amended Soil RBDP was prepared and approved by EPA on August 29, 2023. This amendment allowed for the voluntary removal of the asphalt cap and the excavation of PCB-contaminated soils with concentrations greater than 25 ppm (originally 100 ppm in the first Soil RBDP) which were then sent to a licensed off-site landfill between 2023 and early 2024. Additionally, lake sediments containing PCBs in excess of 1 ppm and cadmium greater than 5 ppm cadmium were removed in 2024. Soils with less than 25 ppm PCBs remain on site and were capped with a Final Cover after lake sediments were emplaced. This approach has further reduced long-term environmental risk from PCBs.

BASF expects to complete the disposal of approximately 600 cubic yards (CY) of impacted soil/ sediment material and final site restoration activities in the spring of 2025.

Other activities include the following:

- Impacted sediments in immediately adjacent Turnpike Lake have been addressed in a Sediment RBDP approved by EPA in December 2023, and remediation is complete;
- Impacted sediments in streams off-site are being evaluated for ecological risk;
- Site groundwater flows northeast, away from the Town of Plainville water wells located west across Turnpike Lake. On-site and off-site groundwater has been and will be undergoing periodic in-situ injections and monitoring to remediate CVOCs and metals.
- As part of this comprehensive, multi-media plan, Media Protection Standards (MPSs) have been proposed to EPA for Site environmental constituents of concern for soil, groundwater, surface water, and lake and stream sediments. MPSs are being applied to each category of concern. Soil MPSs were approved and implemented in the recent excavation and capping program.

Both Soil and Sediment RBDPs have the following specific remedial action objectives:

- a. Eliminate direct contact to impacted sediments, soil and groundwater; and
- b. Eliminate constituent of concern migration: PCBs and metals in sediments, soil and groundwater, and PCBs, metals and CVOCs in soil.

Planned Site Remediation Actions And Safeguards

BASF is in the process of addressing, downstream sediments impacted by metals and VOCs from the facility; and 2) is continuing in-situ treatments for VOCs in groundwater on-site, and evaluating off-site groundwater, for compliance with regulatory standards under both EPA and the Massachusetts Contingency Plan (MCP), 310 CFR 40.0000.

Restoration of vegetation around Turnpike Lake will occur in the Spring of 2025.

Two dams located on either side of BASF's property are in a state of disrepair. The south concrete dam, less than six feet high and approximately 30 feet long, is not state-regulated, but the larger, north dam which is 7 feet high and approximately 100 feet long, consisting of concrete and compacted earth is regulated by the Massachusetts Department of Conservation and Recreation (DCR). A design for repair of the north dam is 90% complete and was submitted to the DCR for approval. An Environmental Notification Form has been submitted under the Massachusetts Environmental Policy Act (MEPA). A Town of Plainville Conservation Commission Notice of Intent approvals were obtained in 2021 and 2023, and will be updated as needed. Dam condition inspections have been conducted every six months since May 2020 by BASF as a good neighbor assistance to the non-profit NRTP. Assuming the necessary permits are received in early 2025, the dams are expected to be repaired in Summer/Fall 2025.

BASF has also prepared a work plan for additional sampling of sediments and benthic organisms to complete an Ecological Risk Assessment (ERA) for both off-site and on-site surface waters, as required under the RCRA program. This work plan was approved by EPA in May 2023. Sampling in support of the ERA commenced in summer 2024 and will continue as needed.

In April of 2025, additional treatment of groundwater via a combination of physical-chemical-biological treatment injections in three onsite areas will take place, continuing on-site groundwater in-situ remediation activities which started in 2014.

After the site cleanup has been achieved, BASF may offer the property for sale for commercial or industrial use. An Activity and Use Limitation (AUL) will be filed once remediation is complete, which will be recorded in the Norfolk Registry of Deeds. This Deed restriction will prohibit residential use.

Description Of The Post-Remediation Conditions

The upland excavated areas will be backfilled and/or graded to restore them to match existing grades and will be seeded with a natural wildflower mix that is well-recognized for supporting wild turkey, whitetail deer, and other local wildlife.

The long-term integrity and performance of the Final Cover and Engineered Barriers will be assured by an inspection, monitoring and maintenance plan, overseen and prepared by BASF which will be submitted to the EPA and MassDEP. Financial assurances will be established to adequately provide for ongoing and future monitoring, maintenance, and repair of the soil cover and engineered barriers.

Wetlands resource areas and buffer areas will be restored in accordance with applicable work order conditions for wetland vegetation restoration, as verified by the appropriate regulatory agency. EPA will also receive a report on completed site activities,