FACILITY CLOSURE REPORT
FORMER DOW CHEMICAL FACILITY
412 COMMONWEALTH ROAD
WAYLAND, MASSACHUSETTS

Prepared for

The Dow Chemical Company
2020 Dow Center
Midland, Michigan 48674

Prepared by:

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EXECUTIVE SUMMARY

Ransom Environmental Consultants, Inc. (Ransom) has prepared this report presenting the results of the Voluntary Facility Closure activities performed as part of the voluntary response actions conducted at the former Dow Chemical Facility at 412 Commonwealth Road in Wayland, Massachusetts (the Site). The Dow Chemical Company (Dow) chose to perform these voluntary activities in response to public comments and at the request of the Town of Wayland.

The Voluntary Facility Closure included the demolition of the on-site buildings (the laboratory building, the former solvent storage shed, the former cooling tower building, the garage, and a storage shed), removal of the concrete pad associated with a former electrical transformer, removal of the sump structure located at the northeast corner of the former laboratory building, closure of the two septic systems, and removal of the dredge spoils piles, followed by confirmation sampling and restoration activities. The work was completed to facilitate the sale of the property to the Town of Wayland for conservation or recreational use.

The majority of the demolition debris generated was recycled. Approximately 2,300 tons of bricks and concrete were recycled by Deloury Construction of Andover, Massachusetts, and approximately 92 tons of structural steel and piping were recycled through State Lane Salvage of New Bedford, Massachusetts. Fluorescent bulbs and ballasts were removed from the buildings and were recycled by Global Recycling Technologies, Inc. of Stoughton, Massachusetts. The remaining material (approximately 525 tons), consisting of typical demolition debris, was disposed of with the dredge spoils piles materials at Allied Waste Industries, Inc.'s Niagara Recycling Inc., facility in Niagara Falls, New York. Loam backfill was delivered to the Site to return the excavated areas back to original grade elevations. Re-graded areas will be hydro-seeded and the establishment of grasses is projected to be completed by July 2000.

Following the removal of the floor slabs of each building, Ransom collected post-demolition composite soil samples for confirmatory chemical analysis. Ransom collected composite soil samples from below the former floor slabs of the laboratory building, former electrical transformer pad, former solvent storage shed, former cooling tower, below the former septic tanks, and the laboratory sump.

Based on the results of the soil chemical analyses associated with the Voluntary Facility Closure, Gradient Corporation (Gradient) of Cambridge, Massachusetts, performed a Method 3 Risk Characterization for this portion of the Dow property. The objective of the Method 3 Risk Characterization was to assess the risks of harm to both human and environmental receptors associated with potential exposure to the soils present below the former buildings, septic systems, sump area, and transformer pad. Human health risks were evaluated in two exposure areas: the Former Lab Building Area and the former Cooling Tower Area. The Former Lab Building Area consists of the areas around the former lab building, the former transformer pad, the former upper and lower septic systems, and the former sump area. The Cooling Tower Area consists of the area around the former cooling tower building and former solvent storage shed. The total excess lifetime cancer risk (ELCR) for the hypothetical future resident in both areas is 2×10^{-6}. These risks are below the MA DEP cancer risk limit of 1×10^{-5} (1 excess cancer in 100,000). The Hazard Index (HI) for the hypothetical future child resident (1–8 years old) is 0.008 in the Former Lab Building Area and 0.01 in the Cooling Tower Area. These values are below the MA DEP non-cancer risk limit, which is a cumulative HI of 1.0. For ecological receptors, total hazard indices are at or below the MA DEP limit of 1.0.

Ransom concludes that all Voluntary Facility Closure activities have been completed at the former Dow facility and the property is suitable for conservation or recreational use.