

**IMPACTED SOIL AND GROUNDWATER MANAGEMENT PLAN  
FORMER T.C. ESSER PAINT MANUFACTURING SITE  
3131 W. GALENA STREET, MILWAUKEE, WI 53212**

Soil and groundwater at the former T.C. Esser Paint Manufacturing facility may contain contaminants from historical operations at the site. As of December 2009, all known underground storage tanks (17 total) were removed from the site and most of the significantly impacted soil in identified release areas was excavated and disposed at a licensed landfill. Some impacted soil may remain in the vicinity of the loading dock on the north side of the 1931A building (excavations beneath the loading dock were not performed). Residual impacts may remain adjacent to basement walls and likely beneath the loading dock.

Based on historical activities at the site and the detection of residual compounds in soil that exceed Chapter NR 720 Residual Contaminant Levels (RCLs) for the direct contact exposure pathway, it is critical that soil generated during demolition activities are managed in accordance with Wisconsin Department of Natural Resources (WDNR) regulations. All of the subsurface soil and groundwater at the site is considered to be impacted by low concentrations of volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), and/or inorganic compounds. Sigma prepared this "Impacted Soil and Groundwater Management Plan" to address WDNR concerns relating to compliance with WDNR requirements for handling, storage, and on-site reuse of impacted excavated soil and/or groundwater. The following procedures shall be followed by contractors when performing subsurface excavation and/or dewatering activities.

**SOIL**

The majority of near-surface soil at the site consists of some historical fill material which is generally impacted with low levels of petroleum VOCs (PVOCs), PAHs, and/or inorganics (arsenic and lead) that exceed established or suggested Chapter NR-720 RCLs. Due to the impacted soil, all contractors handling soil must have a supervisor on-site that has OSHA 40-hour HAZWOPPER training. Permission was obtained from the WDNR to excavate, store, and replace low-level contaminated soil across the site.

When low-level impacted soil is excavated (entire site) the following procedures shall be followed:

- As much soil as possible should be returned to the excavation that it was removed from.
- Excess low-level impacted soil shall be moved and stockpiled at an on-site location designated by the environmental consultant (Sigma Environmental Services, Inc. [Sigma]).
- Unsuitable material; large wood, metal or concrete debris unsuitable for burying or grading; or soil that is geotechnically unsuitable for reuse in an excavated area shall be moved and stockpiled at a designated on-site location. Metal or concrete should be recycled with other demolition debris. Wood will be recycled or disposed by the demolition contractor. Unsuitable soil will be stockpiled on site and disposed by others.
- Contractors shall review where known release areas/source areas are prior to initiating excavation.

If grossly-impacted soil is encountered in an excavation, the following procedures must be followed:

- The contractor shall immediately notify the environmental consultant (Sigma - Ross Creighton [414-643-4120] or Randy Boness [414-643-4116]).
- Grossly impacted material shall be segregated from low impacted material and placed in a separate stock pile on an impervious surface (asphalt, concrete, or plastic). The grossly impacted stock pile location shall be determined in consultation with the environmental consultant.
- Grossly impacted stockpiles shall be covered with plastic at the conclusion of the excavation or end of each day.

### **EXCAVATION WATER**

Water removed from excavations at the site shall be considered to be impacted with low levels of VOCs, PAHs, and inorganics. Impacted water may not be discharged to adjacent properties or the storm sewer. The Owner will obtain a NOTICE OF INTENT (NOI) letter for the site from the Milwaukee Metropolitan Sewerage District (MMSD) prior to demolition to facilitate discharge to the sanitary sewer (if necessary). An example NOI is attached. Contractors will be required to meet the conditions of the MMSD NOI if dewatering is necessary. The following procedures shall be followed whenever water is pumped from excavations.

- No water from excavations within the site may be discharged to adjacent properties or the storm sewer.
- All groundwater and surface water from excavations must be discharged to the sanitary sewer in accordance with the conditions presented in the MMSD NOI.
- Settling and/or filtering procedures will likely be required to meet the Total Suspended Solids 100 mg/L requirement.
- Samples will be collected by the Owner's representative during discharge and analyzed for conditions in the NOI.

Contaminant concentrations detected in site groundwater to date do not currently exceed the discharge limits in the example NOI for total VOCs, metals, or PCBs. Oil and grease and total suspended solids have not been analyzed.

If grossly impacted water is encountered:

- The contractor shall immediately notify the environmental consultant (Sigma - Ross Creighton [414-643-4120] or Randy Boness [414-643-4116]).
- Disposal of grossly impacted liquids will be coordinated and managed by others.