



## REGION 5

CHICAGO, IL 60604

October 20, 2023

Heather Ziegelbauer, PE  
Jacobs Engineering Group Inc.  
1610 N. 2nd Street, Suite 201  
Milwaukee, Wisconsin 53212

Subject: Review: Revised Soil Management Plan  
Tyco Safety Products - Ansul Stanton St Fac  
U.S. EPA ID NO. WID006125215  
1 Stanton Street  
Marinette, WI 54143

Dear Ms. Ziegelbauer,

The Environmental Protection Agency (EPA) and the Wisconsin Department of Natural Resources (WDNR) have reviewed the Revised Soil Management Plan dated and received on August 2, 2023, submitted for this facility. The revised plan was requested in an EPA and WDNR review letter sent on June 30, 2023. Prior to the Soil Management Plan being approved, the following comments will need to be addressed:

### General Comments

1. The May 2023 Draft Soil Management Plan and August 2023 transmittal memo should not be included in the revised SMP. Instead, include an introduction that describes the purpose of the document and how it should be used. Previously approved documents that form the basis of the plan should be referenced in the introduction.
2. The flow chart, figures and tables can form the main body of the document. The MMP template and supporting documents can be included as an attachment to the SMP.

### Flow Chart and Attachments:

1. A modified flow chart with EPA/WDNR's suggested edits is attached to this letter.
2. Consider labeling the major steps or "bubbles" in the flow chart for ease of use and review.
3. If site activities will result in RCRA remedy components being disturbed, then Tyco must satisfy both state and federal requirements where appropriate. Soil management under NR 718 applies whether a RCRA remedy component is disturbed or not.

- a. Update the flow chart to direct the user to the Waste Category decision step from both paths of the RCRA remedy component decision (yes/no).
4. Consider combining the bubbles under the “yes” a RCRA remedy component is impacted.
5. Generator knowledge and/or the use of waste profiles are not appropriate means to characterize waste. Representative analytical data through sampling must occur with each waste determination.
  - a. The use of waste profiles assumes static conditions in which the ongoing source at the site, groundwater, offers minimal chance of recontamination when in fact it has been shown that the water table can fluctuate as close as 1-2 ft below the ground surface.
  - b. Site activities, such as the improper stockpiling of contaminated soils or the disturbance of RCRA remedy components, can also impact the results of past waste profiles.
  - c. Waste determination sampling can be avoided through “over-characterization” or treating/handling any waste generated as hazardous.
6. Consider simplifying the flow chart by removing the onsite/offsite management decision bubbles (4); “Is the soil proposed...”, “Is there sufficient data...”, “Complete waste determination...”, and “Complete waste characterization...” Regardless of whether soil is managed on or off site a waste determination must be made. If hazardous it must be managed per RCRA and NR600. If contaminated but non- hazardous, NR 718 will apply.
  - a. Regardless if the 2) Onsite Management – “Complete waste determination...” step is removed as suggested, note that NR 718 does not include a definition for “waste determination” but does include sampling requirements when characterizing soil.
7. For non-hazardous contaminated soil, an onsite/offsite decision point should occur in the flow chart to determine whether an MMP is needed under NR 718.12 Management of Contaminated Soil and/or NR 718.05 Storage of Contaminated Soil.
8. Federal hazardous waste code citations should be included in the Hazardous waste soil step.
9. The general statement “and other components relevant to the integrity of the remedy” should be added at the end of note #1 on the flow chart figure.
10. Attachment A-1 – Waste characterization documentation must include analytical results as well as field notes and photo logs.
11. Information in Attachment A-2 Location Standard Exemption Request Details can be incorporated in Section 6.0 Locational Criteria Exemption Request of Attachment A-2 and will reduce duplicate information.
12. Include a summary statement that indicates all relevant and appropriate documentation will be provided following completion, including but not limited to:

- a. Maps, drawings, and/or cross sections that depict how contaminated material was managed.
- b. A synopsis of the work conducted and an explanation as to how it complied with the material management plan.
- c. A description of any changes made to the planned management activity and an explanation as to why they were necessary for the project.
- d. Any field observations or results of monitoring conducted during the management activity.
- e. A description of how new site conditions are protective of human health, safety, welfare and the environment.
- f. Fieldnotes.
- g. Waste Characterization Lab Data.
- h. Photo Logs.
- i. Waste Manifest.

If you have any questions about this review, please contact me via phone at (312) 353-4374 or through email at [Kleinberg.Andrew@epa.gov](mailto:Kleinberg.Andrew@epa.gov).

Sincerely,

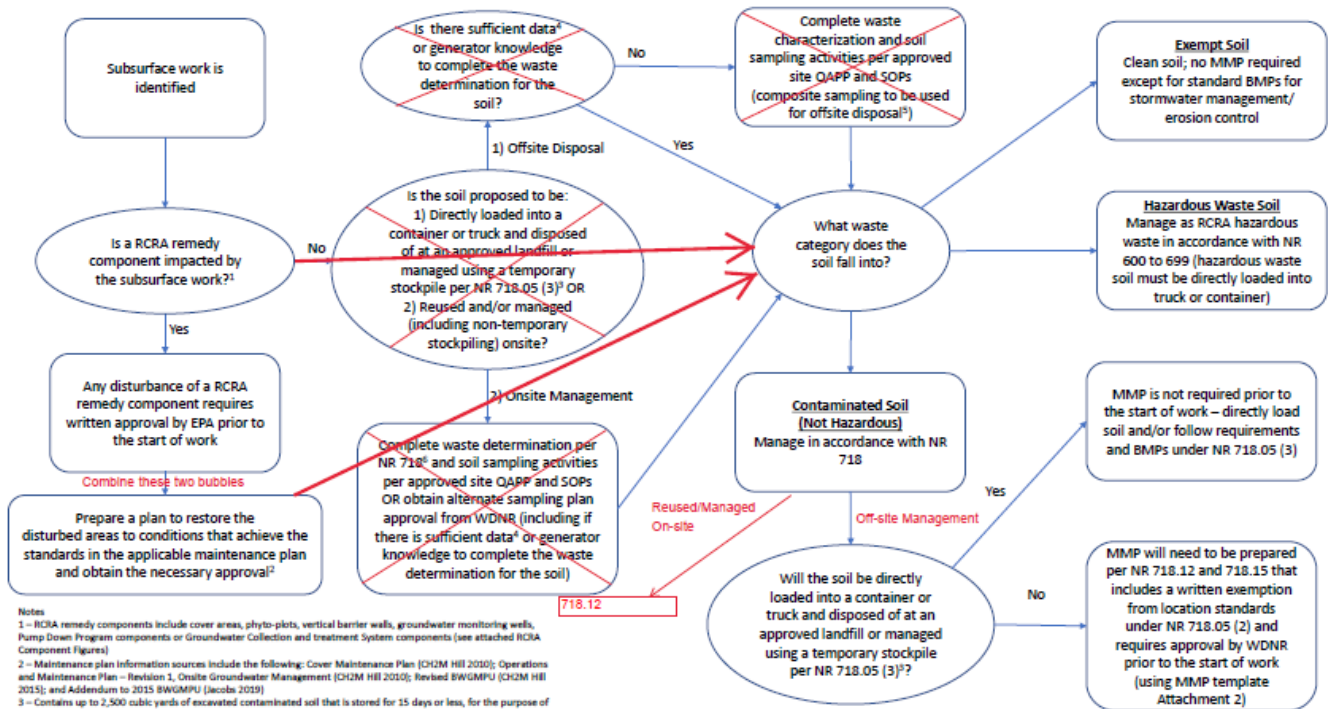


Andrew Kleinberg  
Project Manager - Geologist  
RCRA Corrective Action Section 2  
Land, Chemicals & Redevelopment Division, Region 5, U.S. EPA  
77 West Jackson Blvd. (LR-16J), Chicago, IL 60604

Attachment: Soil Management Plan Flow Chart with EPA/WDNR  
Suggested Edits

Ecc: Shilpa Patel, RB, USEPA  
Rich Clarizio, US EPA ORC  
Angela Carey, WDNR  
Sarah E. Krueger, WDNR  
Denice Nelson, Tyco

Attachment: Soil Management Plan Flow Chart with EPA/WDNR Suggested Edits



Notes

- 1 - RCRA remedy components include cover areas, phytoblocks, vertical barrier walls, groundwater monitoring wells, Pump Down Program components or Groundwater Collection and treatment System components (see attached RCRA Component Figures)
- 2 - Maintenance plan information sources include the following: Cover Maintenance Plan (CH2M Hill 2010); Operations and Maintenance Plan - Revision 1, Onsite Groundwater Management (CH2M Hill 2010); Revised BWGMPU (CH2M Hill 2015); and Addendum to 2015 BWGMPU (Jacobs 2019)
- 3 - Contains up to 2,500 cubic yards of excavated contaminated soil that is stored for 15 days or less, for the purpose of loading the soil into transfer vehicles or containers
- 4 - Site chemicals of concern include RCRA metals, volatile organic compounds, per- and polyfluoroalkyl substances, and limited to no semi-volatile organic compounds (see Attached Chemicals of Concern Figures and Tables)
- 5 - Suggested sampling protocol for offsite disposal, may vary per waste disposal facility requirements - 1 composite for first 600 CY (made up of samples of initial 300 CY increments) and 1 composite per 900 CY (composite of 300 CY increments) thereafter
- 6 - For NR 718 waste determination-100 cubic yards of soil, for the first 600 yards with a minimum of two samples being collected. >600 cubic yards, one sample for each additional 300 cubic yards shall be collected for analysis

- BMPs - best management practices
- MMP - Material Management Plan
- BWGMPU - Barrier Wall Groundwater Monitoring Plan Updated
- SOP - Standard Operating Procedure
- QAPP - Quality Assurance Project Plan
- RCRA - Resource Conservation and Recovery Act
- EPA - U.S. Environmental Protection Agency
- WDNR - Wisconsin Department of Natural Resources

Attachment 1. Soil Management Plan Flow Chart  
Tyco Fire Products LP, Marinette, WI

