

# INVESTIGATION-DERIVED WASTE MANAGEMENT PLAN

MIDWEST MANUFACTURING/NORTH FARM SITE  
100 HIGH STREET  
KELLOGG, IOWA 50135

ClearPath Project Number:  
CPCJV24001

Prepared for:



United States Environmental Protection Agency Region 7  
11201 Renner Boulevard  
Lenexa, Kansas 66219

August 2024



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U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 7  
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TECHNICAL SUPPORT  
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**Prepared by:  
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Date Submitted:	August 23, 2024
EPA Region:	7
Contract No:	68HE-01-18-D0013
Order No.:	68HE-07-24-F0127
Reference No.:	PR-RAF7-24-00015
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## ATTACHMENTS

Attachment A Waste Inventory Tracking Form

## ACRONYMS AND ABBREVIATIONS

CFR	Code of Federal Regulations
CPC	ClearPath Consultants JV
ESO	Environmental Services and Operations (CLIN 0002)
IDW	Investigation-Derived Waste
MMNF	Midwest Manufacturing/North Farm
OU	operational unit
RFO	Request for Offers
U.S. EPA	United States Environmental Protection Agency
WMP	Waste Management Plan

## 1.0 INTRODUCTION

This Waste Management Plan (WMP) has been prepared to address the investigation-derived waste (IDW) management associated with the Technical Support at the Midwest Manufacturing/North Farm (MMNF) site in Kellogg, Jasper County, Iowa (the Site) completed under Environmental Services and Operations (ESO) Performance Work Statement, Contract Number 68HE-01-18-D0013, Order Number 68HE-07-24-F0127, for U.S. Environmental Protection Agency (U.S. EPA) Region 7. This WMP meets the requirements for the accumulation of hazardous waste for less than 90 days, according to 40 Code of Federal Regulations (CFR) 262.34(a). A copy of this WMP will be maintained onsite and at the ClearPath Consultants JV (CPC) office.

The IDW WMP has been prepared and reviewed by the Atlas project manager. The Atlas project manager is responsible for IDW oversight and IDW characterization. This WMP will be amended as necessary by the project manager and the Plan will be distributed to trained personnel associated with IDW handling at the Site. The following contact information is provided for the current Atlas project manager:

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## 1.1 Site Description

The MMNF Site (MMNF) is located north of the intersection of interstate 80 and U.S. Highway 224 in the City of Kellogg, Jasper County, Iowa. This National Priorities List (NPL) Site (CERCLIS No.IAD069625655) consists of two dis-contiguous pieces of parcels areas; Midwest Manufacturing OU2 and North Farm OU1. The Midwest Manufacturing plant operated an electroplating and painting facility as early as 1973, utilizing heavy metals such as nickel, zinc, and cadmium.

- North Farm Operable Unit 1, (OU1), located 2 miles from the original manufacturing facility, has an unlined disposal cell located on approximately 0.6 acres of parcel area, and
- Midwest Manufacturing Operable Unit 2, (OU2), which is located in the City of Kellogg, has the original manufacturing facility, an unlined disposal cell, and has contaminated groundwater plume in the ground.

## 2.0 INVESTIGATION-DERIVED WASTE

### 2.1 Sources of Investigation-derived Waste

Management of IDW will be compliant with all applicable or relevant and appropriate requirements and consistent with the following U.S. EPA Guidance; *Management of Investigation-Derived Wastes During Site Inspections* (U.S. EPA 1991), *Guide to Management of Investigation-Derived Waste* (U.S. EPA 1992), and *Standard Operating Procedure 2049: Investigation-Derived Waster Management* (U.S. EPA 2015).

Waste characterization will be performed for groundwater purge water from sampling events and soil/sediement removed during the direct push investigation and well installation. Characterization of IDW will generally first be completed through use of existing information (manifests, safety data sheets, previous test results, knowledge of the waste generation process, and other relevant records). After IDW has been designated either hazardous or non-hazardous through field testing and/or laboratory analysis, Atlas will manage transportation and disposal services of generated IDW. In accordance with the revised U.S. EPA Region 7 *Performance Work Statement for Midwest Manufacturing/North Farm Site*, the following will be disposed of as (as needed) hazardous waste such as purge water, soil cuttings, decontaminated personal protective equipment and equipment and supplies. Generated IDW associated with Technical Support at Midwest Manufacturing/North Farm is as follows<sup>1</sup>:

#### ***Purge Water***

Purge water is generated when groundwater is sampled during onsite groundwater monitoring and via the use of direct push technology or low flow purging. The pH of the collected purge water will be recorded by the onsite field personnel using a calibrated pH field-testing instrument at the time of IDW generation<sup>2</sup>. If purge water has a pH greater than 10 or less than 2 standard units, which is not anticipated, then the drum will be labeled and managed as hazardous waste and placed on a hazardous waste pallet within the IDW staging area. In the event the Atlas project manager determines (based on historical or current laboratory analysis) that the generated purge water is not characterized as hazardous waste, Atlas will discharge purge water into a specific sanitary sewer system manhole as approved by the city of Kellogg.

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<sup>1</sup> Groundwater sampling will be completed using a pneumatic pump and tubing. Pump tubing shall be replaced with clean tubing, prior to sampling and between each well, the pump shall be cleaned internally and externally per the provisions of Standard Operating Procedure Field Decontamination 2006. Following U.S. EPA Standard Operating Procedure *Sampling Equipment Decontamination*, equipment decontamination will be completed via non-abrasive cleaning methods using multiple washes using spray bottles followed by air drying. No decontamination water IDW will be generated due to the method of decontamination.

<sup>2</sup> Evaluation of pH applies to characteristic hazardous waste code D002, and not toxicity characteristic constituents (D005 onwards).

### ***Soil Cuttings***

Soil Cuttings are generated during the installation of monitoring wells and via the use of direct push technology. Soil samples will be taken at the time of generation and sent for laboratory analysis. Excess soil will be stored in metal drums on pallets in the IDW staging area pending results of the analysis. In the event the Atlas project manager determines (based on historical or current laboratory analysis) that the generated soil cuttings are not characterized as hazardous waste, Atlas will dispose of the soil cuttings via a municipal landfill. In the event the Atlas project manager determines (based on historical or current laboratory analysis) that the generated soil cuttings are characterized as hazardous waste, Atlas will dispose of the soil cuttings via a CERCLA permitted hazardous waste landfill.

### ***Decontaminated Personal Protective Equipment and Disposable Equipment/Supplies***

Decontaminated personal protective equipment and disposable equipment/supplies are generated during sampling work. Decontaminated personal protective equipment and spent equipment/supplies are considered Resource Conservation and Recovery Act non-hazardous and will be containerized in double-lined trash bags and disposed into a U.S. EPA-approved Dumpster and/or in a municipal landfill.

## **2.2 Investigation-derived Waste Characterization Procedures**

Laboratory analyses will be performed on groundwater samples and this data will be used to determine if the purge water IDW meets the minimum requirements to be considered hazardous waste or if the purge water IDW will be managed as nonhazardous<sup>3</sup>. If analytical results indicate purge water is nonhazardous, then IDW purge water will be disposed of as nonhazardous IDW.

Generated IDW will be analyzed for purposes of determining if the IDW is defined as a characteristic hazardous waste. Field testing (pH) and laboratory analyses will be performed on the associated groundwater samples to determine if the IDW meets the minimum requirements to be considered hazardous waste in accordance with 40 CFR 261 Subpart C — *Characteristics of Hazardous Waste*.

The four characteristics noted in 40 CFR 261 Subpart C include ignitability, corrosivity, reactivity, and toxicity. Corrosivity is determined according to the pH of the IDW, which will be taken in the field at the time of generation. If the field-tested pH of the IDW is greater than 10 or less than 2 standard units, then the IDW is considered a characteristic hazardous waste and a laboratory sample of the IDW will be collected for verification of pH (EPA Method SW8046-9045D for solids and SW8046-9040C for liquids). Toxicity is characterized in accordance with

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<sup>3</sup> Considering the age of the MMNF Site, and considerable previous sampling data, the IDW has been disposed of as non-hazardous. The historical IDW characterization process consisted of sampling of the waste and the characteristics verified prior to disposal.

40 CFR 261 Subpart C through laboratory analysis based on either contaminants of concern associated with the sampled groundwater or by Toxicity Characteristic Leaching Procedure analysis (Method 846-1311) as directed by the Atlas project manager.

### 2.2.1 Investigation-derived Waste Characterization Recordkeeping

IDW recordkeeping will be maintained by the Atlas project manager for all IDW generated at the Site. Records are maintained for a minimum of 3 years as required by state and federal regulations. One week prior to the generation of IDW, the Atlas project manager will coordinate and communicate the source of collection (Site and well IDs), time period of collection, and the anticipated volume of IDW to be generated. The Atlas project manager will review historical laboratory analysis associated with the IDW source and evaluate the likelihood that the generated IDW will be hazardous or non-hazardous.<sup>4</sup>

Recordkeeping will be initiated in the field by the Atlas project manager. The following information will be required to be recorded following IDW generation:

- Date of IDW generation;
- Container identifications associated with IDW;
- Source of each IDW container (i.e., Site name and monitoring well identification);
- Volume of IDW associated with each IDW container;
- pH field testing results of each IDW container; and
- Anticipated laboratory analysis (contaminants of concern and/or Toxicity Characteristic Leaching Procedure).

No IDW samples will be collected for the purge water for waste classification. Instead, results from groundwater sampling from wells having purge water will be used for waste classification purposes. Groundwater from 17 monitoring wells will include analysis and 30 direct push technology (DPT) groundwater sampling locations (as detailed in the *Performance Work Statement Environmental Services and Operations (ESO) Task Order for MMNF*) for:

- **Volatile organic compounds**
  - Volatile organic compounds by U.S. EPA Method 3230.13
- **PFAS**
  - Total PFAS by U.S. EPA Method 1633

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<sup>4</sup> Review of historical analytical data indicates that IDW generated from the MMNF Site will likely be non-hazardous.



- **Metals**

- Total Metals by U.S. EPA Method 3122.03

The Atlas project manager will review the resulting groundwater analytical data and make a final determination as to the hazardous or non-hazardous status of the IDW. The recordkeeping information described above, including the resulting laboratory analyses, will be collected, and provided to the U.S. EPA for approval. Once the IDW package is accepted by the U.S. EPA, an IDW disposal will be scheduled through the city of Kellogg.

Based on an agreement with the City of Kellogg, all non-hazardous purge water will be discharged into a sanitary sewer system manhole near the city of Kellogg's Wastewater Treatment Plant for further treatment. The Kellogg Wastewater Treatment Plant is approximately 2,000 feet east of the Site on Highway 224 in Kellogg, Iowa (41.705397, -92.900786). The Atlas project manager will coordinate with the city of Kellogg prior to purge water disposal. The date of the IDW discharge will be recorded by the Atlas project manager and maintained within the IDW records.

IDW designated as hazardous waste must be properly disposed offsite within 90 days from when it was generated.

### **3.0 INVESTIGATION-DERIVED WASTE MANAGEMENT**

As IDW is generated, it will be stored onsite in the area where it is generated and remain in that location until it has been characterized. All generated IDW will be placed into designated IDW containers (holding tanks and drums). The containers will be in good condition and suitable for transportation. IDW containers will be placed in a configuration which will allow room for inspections, operations and maintenance, and handling.

If the IDW is deemed hazardous, IDW transportation and disposal services are to be provided by Unified Contracting Services (Unified) of Des Moines, Iowa. As necessary, Unified will generate a waste profile (including waste generator information, waste stream information, and physical characteristic information) which will be sent for approval to the disposal facility. If the waste is deemed hazardous and once it is approved for disposal by the facility, Unified will pick up the IDW waste and transport it to the facility and a Uniform Hazardous Manifest will be generated which will document the completed disposal practices. The generated waste disposal documentation will be provided to the U.S. EPA in final reporting.

Each container will be labeled with the following information: contents, name of generator, well number, and date. In addition, each container will be assigned a unique tracking number

which will identify the location from which the contents were generated. This tracking number, along with other pertinent information, will be recorded in the field logbook.

### 3.1 Drum Handling Procedures

IDW containers shall be handled by Atlas field personnel in a safe and effective manner in order to minimize the possibility of accidental IDW spills and leaks. The following minimum IDW drum handling standards are provided to ensure against potential spills and leaks:

- IDW drums will be stored on pallets to reduce contact between soil and corrosion of base of containers.
- IDW containers shall remain closed with sealed lids at all times except in the event that sampling of IDW is necessary.
- IDW containers shall be in good condition and free of defects which could potentially result in spills and/or leaks.
- In the event an IDW container is not in good condition, then the contents of the IDW container will be transferred, or *overpacked*, such that the potential to spill and/or leak is eliminated.
- IDW containers shall be carefully moved with the use of a hand truck.
- IDW containers shall be labeled properly and the labeling shall be affixed to the IDW container at the time of generation.
- IDW containers shall be generally clean and free of exterior debris.
- IDW containers will not be stacked on top of one another.
- IDW containers will be arranged in such a manner that the labels face toward an aisle and can be easily viewed.

### 3.2 Container Labeling Requirements

IDW containers shall be labeled by Atlas field personnel at the time of IDW generation with the following information.

- Date of IDW generation;
- Hazardous or non-hazardous waste designation (affix hazardous or non-hazardous label as necessary);
- Source information (e.g., Site name and well identification);
- General location;
- Unique container identification;
- Contents of container (purge water); and
- Volume of IDW within container.

### 3.3 Handling Spills and Leaks

The Atlas project manager and field personnel shall handle all spills and leaks associated with their respective IDW in a safe and effective manner. In the event of a spill or leak, field personnel shall immediately notify the project manager and convey the nature of the spill or leak and consult as to the best course of action. The following guidance is provided regarding spills and leaks:

- In the event an IDW container has leaked or spilled into the hazardous IDW containment pallet(s):
  1. The liquid will be drained or the solid moved into a new IDW container;
  2. The pallet will be washed out with clean water; and
  3. The wash water will be handled as hazardous waste.
- Sorbent material will be used to capture the spilled material and transfer the remaining IDW into a new container, or *overpack* the leaking container.
- For leaks onto soil, the top 2 to 6 inches of visually-impacted soil will be shoveled into a new drum and labeled. If impacted soils remain, the Atlas project manager will be

contacted, and arrangements made in agreement with the U.S. EPA for the services of a cleanup contractor.

- Spill and leaked cleanup materials associated with hazardous IDW containers must be handled and disposed of as hazardous IDW.

## 4.0 REFERENCES

United States Environmental Protection Agency Office of Emergency and Remedial Response.  
*Guide to Management of Investigation-Derived Wastes. OSWER Memorandum 9345.3.03FS.* January 1992.

- *Management of Investigation-Derived Waste During Site Inspections.* EPA/540/G-91/009. Directive 9345.3-02. May 1991.
- *Scientific, Engineering, Response and Analytical Services, Standard Operating Procedure 2049. Investigation-derived Waste Management.* 2015, October 5.
- *Request for Offer (RFO) 68HE0720R0029, Questions and Answers.* 2020, March 25.

**ATTACHMENT A**  
**WASTE INVENTORY TRACKING FORM**