



**U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 7
CLEAN WATER ACT
COMPLIANCE INSPECTION REPORT**

for

Name of Facility: U.S. Army Corps of Engineers – Mississippi River Project Office and Service Base

Facility Address: 25549 SE 182nd Street, Pleasant Valley, Iowa 52722

Mailing Address: 25549 SE 182nd Street, Pleasant Valley, Iowa 52722

Report Prepared on: November 15, 2024

Date

By: Taylor Fontaine, ERG

Signature

Report Final as of: _____

Date

By: NICOLE MORAN, EPA

Digitally signed by NICOLE
MORAN
Date: 2024.11.19 17:14:09 -06'00'

Signature

General Information

Type of Inspection:	Industrial Storm Water
Owner:	U.S. Army Corps of Engineers Mississippi
Operator:	U.S. Army Corps of Engineers Mississippi
GPS Coordinates:	41.573501°, -90.406800°
Permittee:	U.S. Army Corps of Engineers – Mississippi River Project Office and Service Base
Permit/Authorization No:	38365 – 38005
Permit Effective Date:	November 2, 2020
Permit Expiration Date:	November 2, 2024
Receiving Water and/or MS4:	Mississippi River – directly adjacent to the facility
Standard Industrial Classification (SIC) Code:	3731 – ship and boat building and repair

On-Site Inspection Overview

On September 24, 2024, U.S. Environmental Protection Agency (EPA) contractors from Eastern Research Group, Inc. (hereinafter, EPA Inspection Team) conducted an industrial storm water inspection of the U.S. Army Corp of Engineers (USACE) Mississippi River Project Office and Service Base (hereinafter, facility or permittee).

Inspection Date: September 24, 2024 **Entry Time:** 8:10 AM (CT) **Exit Time:** 12:25 PM (CT)

Inspection Date: September 24, 2024

The following personnel were involved in the facility inspection.

Name	Title/Affiliation	Telephone	Email	Signature of Inspector
Inspectors:				
Taylor Fontaine	Inspector – Eastern Research Group, Inc.	(703) 956-1977	Taylor.fontaine@erg.com	
Kelsey Guy	Inspector – Eastern Research Group, Inc.	(703) 633-1103	Kelsey.guy@erg.com	
Facility Representatives:				
Cady Tyron	Environmental Protection Specialist – U.S. Army Corps of Engineers	(309) 794-5600	cady.l.tyron@usace.army.mil	
Jared Christner	Facilities Manager – U.S. Army Corps of Engineers	(309) 794-5600	jared.a.christner@usace.army.mil	
Name	Title/Affiliation	Telephone	Email	Signature
EPA Responsible Official:				
Nicole Moran	Acting Branch Chief – Water Branch of ECAD	(913) 551-7641	moran.nicole@epa.gov	

Credential Presentation

Taylor Fontaine with Eastern Research Group, Inc. presented credentials to Jared Christner and Cady Tyron with U.S. Army Corps of Engineers (USACE) upon arrival at the facility on September 24, 2024, at approximately 8:14 AM. Taylor Fontaine explained that the purpose of the inspection was to observe compliance with the State of Iowa Department of Natural Resources (DNR) National Pollutant Discharge Elimination System (NPDES) Permit No. 1 for Storm Water Discharges Associated with Industrial Activities (hereinafter, the permit). A copy of the permit is provided in Appendix A. Cady Tyron and Jared Christner acknowledged that they were appropriate representatives for the facility. Cady Tyron is listed as the official facility contact on the Authorization to Discharge.

Weather and Precipitation

The weather during the inspection was clear skies with temperatures averaging approximately 65 degrees Fahrenheit. National Oceanic and Atmospheric Administration (NOAA) National Weather Service precipitation data prior to the inspection are provided in the table below.

Precipitation Data Prior to Inspection of the U.S. Army Corps of Engineers – Mississippi River Project Base

Station Name	Date	Precipitation Amount (inches) ^a
BETTENDORF 2.2 SE, IA US US1IAST000	September 20, 2024	0.00
BETTENDORF 2.2 SE, IA US US1IAST000	September 21, 2024	0.01
BETTENDORF 2.2 SE, IA US US1IAST000	September 22, 2024	0.23
BETTENDORF 2.2 SE, IA US US1IAST000	September 23, 2024	0.02
BETTENDORF 2.2 SE, IA US US1IAST000	September 24, 2024	0.17

^a Source: NOAA National Climatic Data Center (<http://www.ncdc.noaa.gov/>).

Documentation

During the inspection, the EPA Inspection Team obtained and reviewed documentation and other supporting evidence regarding compliance with the permit and implementation of the permittee's Pollution Prevention Plan. During the inspection, the EPA Inspection Team requested to review the onsite Pollution Prevention Plan and the previous year's self-inspection report. The copy of the Pollution Prevention Plan provided to the EPA Inspection Team during the inspection was signed/certified by the permittee. A draft unsigned electronic copy of the Pollution Prevention Plan was provided to the EPA Inspection Team post-inspection on September 24, 2024.

Photographs taken by Kelsey Guy, Eastern Research Group, Inc., during the inspection, are provided in Appendix B, and supporting documentation (i.e., exhibits) are provided in Appendix C. An aerial diagram of the facility is provided in Appendix D.

Description of the Facility and Industrial Activity

The U.S. Army Corps of Engineers – Mississippi River Project Base is a maintenance and storage center for the Rock Island District of USACE. The primary mission of the facility is to provide maintenance support for the locks and dams within the district, along with the associated vehicles, vessels, barges, cranes, and tow boats. Further operations include, but are not limited to machine part fabrication, hazardous materials storage, sand blasting of vessels, deck painting, and washing of vessels.

The facility provides maintenance at the Smith Island Recreational area. The facility also provides dredging operations for the Mississippi River miles within its district and houses materials, personnel, and offices to support the facility's operations.

The southwestern portion of the facility houses the main building with offices for personnel. The central portion of the facility is comprised of the outdoor materials storage and machinery parking areas (refer to [Appendix B, Photographs 1 through 3](#) and [Photographs 25 through 33](#)). This area also houses the facility's double-walled, 500-gallon aboveground storage tank (AST) containing diesel fuel; Building B which is the backup generator building; and Building C which is the old machine shop and serves as a storage building for materials and hazardous waste (e.g., waste oils) (refer to [Appendix B, Photographs 4, 8 through 10](#)). The northern portion of the facility includes Building D, the new machine shop completed in December 2023 (refer to [Appendix B, Photographs 11 and 12](#)), as well as the barge docking and maintenance areas (refer to [Appendix B, Photographs 13 through 18](#)).

Facility Drainage Systems and Discharges

The facility is bordered to the east by the Mississippi River. The entire facility grounds, except for a few grassy areas, were surfaced with concrete, asphalt, and gravel. There was no precipitation during the inspection and no clear signs of storm water flow or discharge offsite. Additionally, the permittee had not developed a facility map identifying the facility's drainage system and flow paths. Facility representatives were unaware of any designated outfalls or drainage structures. However, the EPA Inspection Team observed piped conveyances and inlets at the facility (refer to [Appendix B, Photographs 23, 24, 28, 29, 31, and 32](#)). Facility representatives were unaware of any connections from these conveyances and inlets.

Permit Requirements and Potential Noncompliance Items

During the inspection, the EPA Inspection Team observed materials handling and storage areas, maintenance areas, and storm water drainage and conveyance areas of the facility. The following observations were made by the EPA Inspection Team pursuant to provisions of the permit.

Records Observations

Permit Part III.C.4.a (Contents of the SWPPP)

"Each SWPPP shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. Each SWPPP shall identify all activities and significant materials which may potentially be significant pollutant sources."

Observation 1: The facility representatives provided the EPA Inspection Team with a copy of their draft Pollution Prevention Plan, revised in July 2024. EPA Inspection Team observed that the Pollution Prevention Plan is more for the prevention of pollution in general, and not specific to storm water (refer to [Appendix C, Exhibit 1](#)). More specifically, according to the Pollution Prevention Plan, "The focus of pollution prevention is the elimination or modification of activities to achieve a more desirable environmental end result. Pollution prevention includes any practice which reduces the amount of

hazardous substances, pollutants, or contaminants entering the waste stream or otherwise released into the environment, prior to recycling, treatment, or disposal.”

Observation 2: The provided Pollution Prevention Plan did not include a description of potential pollutant sources at the facility.

“Each SWPPP shall identify all activities and significant materials which may potentially be significant pollutant sources. Each SWPPP shall include, at a minimum:

A site map showing an outline of the drainage area of each storm water outfall; each existing structural control measure to reduce pollutants in storm water runoff; and each surface water body;”

Observation 3: The provided Pollution Prevention Plan did not include a site map.

“Each SWPPP shall identify all activities and significant materials which may potentially be significant pollutant sources. Each SWPPP shall include, at a minimum:

A.(2). A narrative description of:

- a.(2).i. known significant materials that have been treated, stored or disposed, in a manner to allow exposure to storm water, during the three years prior to the discharge authorization date of this permit;
- a.(2).ii. the method of on-site storage or disposal;
- a.(2).iii. materials management practices employed to minimize contact of these materials with storm water runoff;
- a.(2).iv. materials loading and access areas;
- a.(2).v. the location and a description of existing structural and non-structural control measures to reduce pollutants in storm water runoff; and
- a.(2).vi. a description of any treatment the storm water receives;

a.(3). A list of releases which prompted the existence of a hazardous condition (as defined in Part VIII of this permit) that occurred at the facility after the effective date of this permit;

a.(4). For each area of the plant that generates storm water associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an estimate of the types of pollutants which are likely to be present in storm water discharges; and,

a.(5). A summary of existing sampling data describing pollutants in storm water discharges.”

Observation 4: The provided Pollution Prevention Plan did not provide information on the following:

- Known significant materials that have been treated, stored or disposed, in a manner to allow exposure to storm water, during the three years prior to the discharge authorization date of this permit
- Materials management practices employed to minimize contact of these materials with storm water runoff
- Materials loading and access areas
- The location and a description of existing structural and non-structural control measures to reduce pollutants in storm water runoff
- A description of any treatment the storm water receives

Permit Part III.C.4.b (Storm Water Management Controls)

“Each facility covered by this permit shall develop a description of storm water management controls appropriate to the facility, and, implement such controls. The appropriateness and priorities of controls in a SWPPP shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such controls:

b.(1). Responsible Person. The SWPPP shall identify a specific individual or individuals within the organization responsible for developing the SWPPP and assisting in its implementation, maintenance, and revision.

b.(2). Risk Identification and Assessment/Material Inventory. The SWPPP shall assess the potential of various sources at the plant to contribute pollutants to storm water discharges associated with industrial activity. The SWPPP shall include an inventory of the types of materials handled. Facilities subject to SARA Title III, Section 313 shall include in the SWPPP a description of releases to land or water of SARA Title III water priority chemicals that have occurred during the three years prior to the discharge authorization date of this permit. Each of the following shall be evaluated for the reasonable potential for contributing pollutants to runoff:

- b.(2).i.** loading and unloading operations;
- b.(2).ii.** outdoor storage activities;
- b.(2).iii.** outdoor manufacturing or processing activities;
- b.(2).iv.** dust or particulate generating processes; and
- b.(2).v.** on-site waste disposal practices. Factors to consider include the toxicity of chemicals; quantity of chemicals used, produced, or discharged; the likelihood of contact with storm water; and history of hazardous condition reporting.

b.(3). Preventive Maintenance. The SWPPP shall describe a preventive maintenance program that involves inspection and maintenance of storm water management devices (e.g. cleaning oil/water separators, catch basins) as well as inspecting and testing plant equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters.

b.(4). Good Housekeeping. Good housekeeping requires the maintenance of a clean, orderly facility.

b.(5). Spill Prevention and Response Procedures. Areas where potential spills can occur, and their accompanying drainage points shall be identified clearly in the SWPPP. Where appropriate, material handling procedures and storage requirements should be considered in the SWPPP. Procedures for cleaning up spills shall be identified in the SWPPP and made available to the appropriate personnel. The necessary equipment to implement a clean up shall be available to personnel.

b.(6). Storm Water Management. The SWPPP shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the source of pollutants). Based on an assessment of the potential of various sources at the plant to contribute pollutants to storm water discharges associated with industrial activity (see Part III.C.4.b.(2). of this permit), the SWPPP shall provide that measures determined to be reasonable and appropriate shall be implemented and maintained.

b.(7). Sediment and Erosion Prevention. The SWPPP shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify measures to limit erosion.

b.(8). Employee Training. Employee training programs shall inform personnel at all levels of responsibility of the components and goals of the SWPPP. Training should address topics such as spill response, good housekeeping and material management practices. The SWPPP shall identify periodic dates for such training.

b.(9). Record keeping and Internal Reporting Procedures. Incidents such as spills, or other discharges, along with other information describing the quality and quantity of storm water discharges shall be included in the records. Inspection and maintenance activities shall be documented and recorded.

b.(10). Non-Storm Water Discharges. The SWPPP shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include a description of the results of any test for the presence of non-storm water discharges, the method used, the date of any testing, and the on-site drainage points that were directly observed during the test. This certification may not be feasible if the facility operating the storm water discharge does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the SWPPP shall indicate why the certification required by this part was not feasible. A discharger that is unable to provide the certification required by this paragraph must notify the Department in accordance with Part V.A. of this permit.”

Observation 5: The provided Pollution Prevention Plan did not identify a specific individual responsible for developing and implementing the SWPPP.

- Observation 6:** The provided Pollution Prevention Plan did not identify drainage points for areas where spills may occur.
- Observation 7:** The provided Pollution Prevention Plan did not provide a narrative or discussion on storm water practices or how the facility could contribute pollutants to storm water discharges associated with industrial activity.
- Observation 8:** The provided Pollution Prevention Plan did not address sediment and erosion protection.
- Observation 9:** At the time of the inspection, the facility had not implemented a training program that addresses the overall goals of the SWPPP. The provided Pollution Prevention Plan addresses personnel training stating, *“While no specific requirements for pollution prevention training exist, all facility staff will receive annual pollution prevention awareness training and energy efficiency training. Such training can be in-house and take place at weekly toolbox safety meetings.”* However, facility representatives stated the training is not specific to storm water and is not documented.
- Observation 10:** During the inspection, facility representatives stated the facility was not documenting incidents such as spills or other discharges. While the provided Pollution Prevention Plan addresses spill prevention, the facility was not documenting any non-storm water discharges.
- Observation 11:** The Provided Pollution Prevention Plan did not include a certification that discharges have been tested or evaluated for the presence of non-storm water discharges.

Permit Part III.C.4.b (Storm Water Management Controls)

“Qualified personnel shall inspect designated equipment and plant area at appropriate intervals specified in the SWPPP, but, in no case less than once a year, except as provided in Parts III.C.4.c.(4). and (5) of this permit.

c.(1). Material handling areas and other potential sources of pollution identified in the SWPPP shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the SWPPP shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the SWPPP, such as spill response equipment, shall be made.

c.(2). Based on the results of the inspection, the description of potential pollutant sources and the pollution prevention measures identified in the SWPPP shall be revised as appropriate within two weeks of the inspection. The revised pollution prevention measures shall be fully implemented within twelve weeks of the inspection.

c.(3). A report shall be made and retained as part of the SWPPP for at least three years. The report shall be signed in accordance with Part VI.H. of this permit. The report shall contain the following: a summary of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the SWPPP, and actions taken in accordance with Part III.C.4.C.(2). of this permit.

c.(4). When the annual site inspections in the SWPPP are impractical because an employee is not stationed on site or does not routinely visit the site, then site inspections shall occur at least once every three years.

c.(5). When the annual site inspections in the SWPPP are impractical for inactive sites (sites where industrial activity is no longer conducted), then site inspections shall occur at least once every five years. After a site becomes inactive, at least one site inspection shall occur within two years.”

Observation 12: The facility was not conducting visual inspections of potential pollutants entering the drainages system, or inspections of spill response equipment, structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures.

During the inspection, facility representatives stated that the facility conducts an annual Environmental Review Guide for Operations (ERGO) inspection. Facility representatives stated that this inspection focuses on potential pollutant sources and includes associated corrective actions. However, facility representatives stated the inspection is not storm water-based and does not focus on storm water-related operations, discharges, and impacts. A copy of the most recent ERGO inspection report is included as Appendix C, Exhibit 2.

Facility Field Observations

At the time of the inspection, the EPA Inspection Team made the following observations at the facility:

1. The EPA Inspection Team observed a double-walled, 500-gallon aboveground storage tank (AST) containing diesel fuel (refer to Appendix B, Photograph 4). Facility representatives stated this tank is used for fueling onsite equipment. There was an adjacent spill kit and no signs of spilled petroleum.
2. The EPA Inspection Team observed floor drains located inside Building C (refer to Appendix B, Photographs 8 through 10) and Building D (refer to Appendix B, Photograph 11). Facility representatives stated that the drains go to sumps that facility personnel pump out the sumps themselves as needed and disposes the fluids to the waste oil storage area. There was no observed fluid in the drains at the time of the inspection.
3. The EPA Inspection Team observed synthetic oils and fuel oils stored in containment inside a storage room in Building D (refer to Appendix B, Photograph 12). There were no drains in the room.

4. The EPA Inspection Team observed one of the locks along the Mississippi River (refer to Appendix B, Photograph 16). These are inspected and maintained by facility personnel.
5. The EPA Inspection Team observed a 600-gallon, single-walled mobile fueler containing diesel (refer to Appendix B, Photograph 22). This tank did not have any other means of containment and was located approximately 120 feet from the river.
6. The EPA Inspection Team observed piped conveyances and inlets at the facility (refer to Appendix B, Photographs 23, 24, 28, 29, 31, and 32). Facility representatives were unaware of the connections to the conveyances/inlets.
7. The EPA Inspection Team observed a parked forklift with evidence of leaked petroleum beneath (refer to Appendix B, Photograph 33).

Field Areas of Concern

Part III.A (Prohibition On Non-Storm Water Discharges)

“All discharges covered by this permit shall be composed entirely of storm water except as follows: discharges from firefighting activities, fire hydrant flushings, potable water sources including waterline flushings, uncontaminated groundwater, foundation or footing drains where flows are not contaminated with process materials such as solvents, springs, riparian habitats, wetlands, irrigation water, exterior building washdown, pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred and where detergents are not used, and air conditioning condensate, that are combined with storm water discharges associated with industrial activity may be authorized by this permit provided the non-storm water component of the discharge is in compliance with Part III.C.4.H of this permit.”

- Observation 13:** The EPA Inspection Team observed an industrial drill press located outside on the ground surface in the facility’s service yard. The drill press’ location was approximately 140 feet upgradient of the Mississippi River. Facility representatives stated the drill press had been located there for two months and were aware of the observed leaked fluids (refer to Appendix B, Photographs 1 through 3). Absorbent materials had been placed on the ground by the facility.
- Observation 14:** The EPA Inspection Team observed two concrete bays that contractors use for aggregate storage (e.g., dirt) located on the property. Facility representatives stated these can be contractors that work directly at the facility or in the nearby area. During the inspection, a contractor rinsed the chute of his cement truck into one of the bays (refer to Appendix B, Photographs 5 through 7). The direction of flow leading from the bay towards the vegetated area at the facility to the south and southeast.
- Observation 15:** The EPA Inspection Team observed barges docked on the Mississippi River at the facility (refer to Appendix B, Photographs 13, 15, 17, and 18). Some of these barges were permanently docked for storage, one was being used for housing maintenance equipment (e.g., sandblasting equipment and airborne dust vacuum), and one barge

itself was undergoing internal maintenance. There were no controls to prevent liquids spilling from these vessels discharging into the river.

Observation 16: The EPA Inspection Team observed hardened concrete in the Mississippi River adjacent to the facility's pier in the northern portion of the facility (refer to [Appendix B, Photograph 14](#)). Facility representatives stated this was likely leftover from pier maintenance activities.

Observation 17: The EPA Inspection Team observed silica anti-slip material stored on the ground directly adjacent to the river (refer to [Appendix B, Photograph 19](#)).

Observation 18: The EPA Inspection Team observed four uncovered dumpsters stored less than 100 feet from the river (refer to [Appendix B, Photographs 20, 21, 25 through 27, 30, and 32](#)). At least two of the dumpsters had holes in the sides and contained metal scrap.

Closing

At the conclusion of the inspection, the EPA Inspection Team held a closing conference with the facility representatives and discussed the preliminary findings and observations of the inspection. The EPA Inspection Team reiterated that all observations were preliminary and not compliance determinations. The closing conference began at 12:11 PM (CT) and concluded at approximately 12:25 PM (CT).