



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III

1600 John F. Kennedy Blvd.
Philadelphia, Pennsylvania 19103-2029

Report Title: Clean Water Act Compliance Inspection Report
Inspection Date(s): 06/07/2023
Regulatory Program(s): National Pollutant Discharge Elimination System (NPDES)
Type of Activity: Industrial Stormwater
Site/Facility Name: Spirit Services Nitro Facility
Permittee(s): Spirit Services of WV, LLC
Site/Facility Operator: Spirit Services
Facility Address: #4 Plant Road, Nitro, WV 25143
Latitude: 38.42445 **Longitude:** -81.845131
County/Parish: Kanawha
Permit Number: WVG611982
NAICS Code: 562211 **SIC:** 4953
Unique Project #: 3E23WN097A

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Unique Project#: 3E23WN097A

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- Attachment 1: Spirit Services Photo Log
- Attachment 2: Site Map
- Attachment 3: WVPDES Permit No. WVG611982

I. Introduction

On June 7, 2023, an inspection team comprised of staff from the U.S. Environmental Protection Agency (“EPA”) Region III (hereinafter, “EPA Inspection Team”) conducted an Industrial Stormwater Inspection of the Spirit Services, Nitro facility (hereinafter, the “Facility”). The purpose of the inspection was to observe compliance with the Clean Water Act (CWA) and to verify compliance with the West Virginia Pollutant Discharge Elimination System (WVPDES) Multi-Sector General Water Pollution Control Permit No. WVG611982 (hereinafter, the “Permit”) and applicable State and Federal regulations.

A. Inspection Opening Conference

The EPA Inspection Team arrived at the Facility at 9:00 AM for the inspection. Inspectors met with the following facility representatives:

Table 1: Inspection Attendee List

Name	Affiliation	Telephone	Email
EPA Region III Inspectors and Contractors			
Edward Simas	EPA	(215) 814-2120	Simas.Edward@epa.gov
Michael Greenwald	EPA	(215) 814-2098	Greenwald.Michael@epa.gov
Site/Facility Representatives			
Alec Duncan	Manager	(304) 543-5203	aduncan@spiritservices.com
Derek Moore	Facility Manager	(304) 553-5877	dmoore@spiritservices.com
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State or County Representatives			
Samantha Blair	WVDEP	(304) 281-6702	Samantha.n.blair@wv.gov

Edward Simas and Michael Greenwald displayed their credentials to Facility representatives at the outset of the inspection inside the administrative building (“block building” on site map), and explained the purpose of the inspection was to observe compliance with its Permit. A copy of the Permit is provided in Attachment 3. The EPA Inspection Team informed Facility Representatives that any information that is deemed to be confidential business information (“CBI”) should be identified to EPA representatives during the inspection and it would be handled as CBI according to EPA’s CBI procedures.

B. Weather and Precipitation Conditions

During the inspection, weather was sunny and warm. National Oceanic and Atmospheric Administration (NOAA) National Weather Service precipitation data for the date of the inspection and 5 days prior are provided in Table 2 below:

Table 2. Precipitation Data

Station Name	Date	Precipitation Amount (inches) ¹
Saint Albans, WV	6/2/23	0.0
Saint Albans, WV	6/3/23	0.0
Saint Albans, WV	6/4/23	0.0
Saint Albans, WV	6/5/23	0.0
Saint Albans, WV	6/6/23	0.0
Saint Albans, WV	6/7/23	0.0

C. Summary of the Facility

Spirit Services owns and operates two facilities in West Virginia: a Beach Bottom location and a Nitro location. The focus of this report will be on the Nitro, WV location. Spirit Services is an industrial fluid recycler that collects liquid and solid waste containing compounds such as glycol and oil. Facility representatives stated that the Facility only collects “Exploration and Production” exempt wastes per RCRA Subtitle C. The company specializes in the fossil fuel industry and provides equipment, transportation, and disposal of fluid wastes for its customers.

The Facility tests all liquid drums and separates wastes by categorization and then ships them off to be sold or transports the waste to public landfills as necessary. The Facility staffs about 12-13 employees, 7 of them being transportation drivers.

II. Facility Activity

During the inspection, the EPA Inspection Team observed the following locations: the administrative building (“Block Building” on site map), Truck Offloading Bay (“Concrete Pad” on site map), a tank farm, Frack tank & truck storage area, and surrounding outdoor storage areas. Additionally, the EPA Inspection Team visited the NPDES Outlet 001 sampling area and a metal storage building utilized for chemical inventory. Facility Representatives mentioned that only simple maintenance is performed on site such as general lubrication and greasing. Otherwise, more complex maintenance such as oil changes are outsourced. Observations were made pursuant to the requirements of the Permit for each area. The EPA Inspection Team’s focus was to review the areas and operations related to industrial activity and stormwater runoff. The observations from the inspection are described in detail below in the Observations section.

¹ Source: NOAA National Climatic Data Center (<http://www.ncdc.noaa.gov/>).

Photographs were taken during the inspection by Michael Greenwald, and are provided in Attachment 1, Spirit Services Photo Log.

III. Observations

Truck Offload Bay (Refer to Attachment 1, photos DSCN3650 – DSCN3664)

The EPA Inspection Team began the inspection at the Truck Offloading Bay (Hereinafter, “Bay”), where tanker trucks offload incoming fluid waste into a tank farm containing four 20,000 gallon Above Ground Storage Tanks (“AST’s”) and ten 26,000 – 35,000-gallon tanks. Spirit Services provided a map of the site which labeled the Bay as a “Concrete Pad”. The Bay area included vacuum tanks utilized for tank cleaning. It was surrounded by a secondary containment pad in case of hose leaks while loading it (DSCN3650 – DSCN 3651). There are drainage sumps located around the Bay area and inside the tank farm (DSCN3658 - DSCN3659). Additionally, there were spill kits around the east and west ends of the Bay (DSCN3654, DSCN3655, DSCN3658, DSCN3660, DSCN3661).

Observation #1: On the south side of the Bay, there appeared to be a used oil drum with cannisters on the top of it open to the air (DSCN3656). Although the oil drum is secondarily contained inside the yellow drum, it appears that the used oil cannisters on top could fall. Additionally, if rain contacts this drum, it is possible that oil residue from the cannisters could spill out. The Facility has a drainage sump nearby this area; therefore, any potential residue spills appeared to be contained (DSCN3658 - DSCN3659).

Tanker Truck Parking Area & Outdoor Storage (Refer to Attachment 1, photos DSCN3665 – DSCN 3670, DSCN3673 - DSCN3688)

Tanker Trucks are parked behind the Bay. The Facility also stores other items near the trucks including tanks, totes, garbage bins, and scrap metal to be recycled or sold. The Facility also has 16 18,000-gallon Frac tanks utilized for oil separation purposes. The Frac tanks were observed to have a secondary containment pad underneath in case of spills or any leakage (DSCN3667).

Observation #2: The EPA Inspection Team noticed staining in a few areas (DSCN3665 - DSCN3666, DSCN3678).

NPDES Outlet 001 (Refer to Attachment 1, photos DSCN3671 – DSCN3672)

Observation #3: The EPA Inspection Team visited the Outlet 001 sampling area for the Facility. It was unclear how samples could be collected from this area. At the opening conference, Facility representatives described the area as a “mud puddle” when a rain event occurred. Facility representatives stated that they would normally sample out of the puddle during a rain event. Otherwise, Facility representatives stated that the Facility has had multiple “no discharge” events. This is documented on EPA’s Integrated Compliance Information System (“ICIS”) database. the ICIS database documents 22 total no discharge events (see Table 3 below). As referenced from photos DSCN3671 – DSCN3672, the

NPDES permitting marker displayed the incorrect ID as “WVG611524”. WVDEP representatives confirmed that the accurate ID is the “WVG611982” ID.

Table 3. Zero Discharge Parameters and Dates

Outlet	Parameter	Monitoring period end date	nodl_desc (No data indicated description)
1	BOD, 5-day, 20 deg. C	9/30/2022	No Discharge
1	pH	9/30/2022	No Discharge
1	pH	9/30/2022	No Discharge
1	Solids, total suspended	9/30/2022	No Discharge
1	Oil and grease, hexane extr method	9/30/2022	No Discharge
1	Nitrogen, ammonia total [as N]	9/30/2022	No Discharge
1	Nitrite + Nitrate total [as N]	9/30/2022	No Discharge
1	Iron, total recoverable	9/30/2022	No Discharge
1	Aluminum, total recoverable	9/30/2022	No Discharge
1	Lead, total recoverable	9/30/2022	No Discharge
1	Chemical Oxygen Demand [COD]	9/30/2022	No Discharge
1	BOD, 5-day, 20 deg. C	3/31/2022	No Discharge
1	pH	3/31/2022	No Discharge
1	pH	3/31/2022	No Discharge
1	Solids, total suspended	3/31/2022	No Discharge
1	Oil and grease, hexane extr method	3/31/2022	No Discharge
1	Nitrogen, ammonia total [as N]	3/31/2022	No Discharge
1	Nitrite + Nitrate total [as N]	3/31/2022	No Discharge
1	Iron, total recoverable	3/31/2022	No Discharge
1	Aluminum, total recoverable	3/31/2022	No Discharge
1	Lead, total recoverable	3/31/2022	No Discharge
1	Chemical Oxygen Demand [COD]	3/31/2022	No Discharge

Metal Storage Building (Noted as “Metal Building” on Site Map (Refer to Attachment 1, photos DSCN3689 – DSCN3704))

The Facility stores chemicals in the Metal Storage Building. Near the entrance, oily debris was observed on a screen to be captured in a metal box below. The EPA Inspection Team noticed floor drains near the entrance and in the other room of the building (DSCN3889 – DSCN3890, DSCN3700). Facility Representatives confirmed that these floor drains are sealed off and do not discharge out of the building. Furthermore, Facility representatives confirmed that these are drainage sumps similar to the sumps observed in the Bay area and are a protective measure to ensure that any potential spills are captured.

Observation #4: The floor drains in the neighboring adjacent room appear in need of a clean out. The drains were filled with an oily liquid at the time of inspection (DSCN3700, DSCN3702).

Most chemicals are stored on pallets, and sulfuric acid was secondarily contained (DSCN3694).

Observation #5: There were drums labeled as “Non-Hazardous Waste” that appeared to be dented (DSCN3692). Additionally, staining was observed below some of the drums (DSCN3697).

A diesel fuel tank was observed in the building as well. The EPA Inspection Teams exited the building via a doorway near the truck loading area (DSCN3704).

SWPPP and GPP (Stormwater Pollution Prevention Plan and Groundwater Protection Plan) Requirements

Section B. Other requirements 19. of the Permit requires that “Each facility covered by this permit shall develop and implement a SWPPP and a GPP. Both the SWPPP and GPP must be developed and maintained as separate stand-alone documents. The SWPPP shall be prepared in accordance with good engineering practices. The SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater discharges associated with industrial activity from the facility. In addition, the SWPPP shall describe the implementation of practices which are to be used to reduce the pollutants in stormwater discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit.”

Observation #6: At the time of inspection, Facility representatives provided a SWPPP and GPP. Facility representatives stated that no modifications have been made to the SWPPP since 2019. However, Facility representatives stated that, Verdantas LLC, the Facility’s environmental consultant, should be working to modify the SWPPP soon.

The Permit states that the SWPPP shall include, “1. A site map indicating, each drainage and discharge structure; an outline of the drainage area of each discharge point, each past or present area used for outdoor storage or disposal of significant materials; each existing structural control measure to reduce pollutants in stormwater runoff; materials loading and access area; each hazardous waste storage or disposal facility (including each area not required to have a Resource Conservation and Recovery Act (RCRA) permit which is used for accumulating hazardous waste under 40 CFR Part 262.34); each well where fluids from the facility are injected underground; sinkholes; springs; and other surface water bodies;”

Observation 7: The site map provided by the Facility at the time of the inspection (Attachment 2) indicated drainage structures such as, sumps and roof drains. However, it appeared that not all of them are noted on the map. The EPA Inspection Team observed a sump adjacently north of the tank farm (DSCN3658, DSCN3659). A sump is also marked on the map as being located adjacent to the “Pole Building” on the map, but the EPA Inspection Team did not observe this sump while on site. Additionally, the map should include “existing structural controls to reduce pollutants in stormwater runoff”. It was unclear if there was an “erosion channel” on site as noted by the map; the EPA Inspection Team did not observe one

in the Outlet 001 area (DSCN3672). The EPA Inspection Team also observed disposal facilities in use by Spirit Services that were not marked on the map, such as garbage bins to the east and west of the “Metal Building” (DSCN3677, DSCN3704). Another observation in the map was the noted “Area Where Water Ponds” on facility boundaries. The EPA Inspection Team walked to these areas, and it appeared that the easement on the north side of the Facility had a depression that would cause water flow towards the neighboring property. In the way the site is graded, it appeared that the majority of the “Area Where Water Ponds” was located on the neighboring or communal public area (DSCN3704 – DSCN3706). A rain event was not observed at the time of or prior to the inspection to be able to observe this ponding.

Benchmark Exceedances & DMR (Discharge Monitoring Report) Non-Reporting

Section III. 2. Reporting of the Permit requires that the “Permittee shall submit each reporting period, a Discharge Monitoring Report (DMR) indicating in terms of concentration, the values of the constituents listed in Part A analytically determined to be in the effluent(s). The required DMR should be mailed no later than 25 days following the end of the reporting period.”

Observation 8: The Facility is currently in “Significant Noncompliance” (“SNC”) status for DMR late reporting and DMR non-receipts. A Facility is automatically triggered in SNC when a Permit parameter is in two or more consecutive quarters of noncompliance. Facility representatives stated that a previous environmental consultant was not uploading DMRs; however, the new environmental consultant, Verdantas LLC, will be submitting them moving forward. For example, there are still missing records highlighted below from the monitoring period end date of 12/31/2021. Additionally, the Facility failed to sample for Oil & Grease, hexane extr. method on 6/30/2022 (Table 4). A table of DMR non-receipts is provided below (See Table 4). The Enforcement and Compliance History Online (“ECHO”) link was sent to the Facility on 6/12/23.

Table 4. Late/Overdue DMR Records

Outlet	Parameter	Monitoring end date	ECHO Status	Date Submitted
1	BOD, 5-day, 20 deg. C	9/30/2022	Late	3/23/2023 (No Discharge)
1	pH	9/30/2022	Late	3/23/2023 (No Discharge)
1	pH	9/30/2022	Late	3/23/2023 (No Discharge)
1	Solids, total suspended	9/30/2022	Late	3/23/2023 (No Discharge)
1	Oil and grease, hexane extr method	9/30/2022	Late	3/23/2023 (No Discharge)
1	Nitrogen, ammonia total [as N]	9/30/2022	Late	3/23/2023 (No Discharge)
1	Nitrite + Nitrate total [as N]	9/30/2022	Late	3/23/2023 (No Discharge)

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1	Iron, total recoverable	9/30/2022	Late	3/23/2023 (No Discharge)
1	Aluminum, total recoverable	9/30/2022	Late	3/23/2023 (No Discharge)
1	Lead, total recoverable	9/30/2022	Late	3/23/2023 (No Discharge)
1	Chemical Oxygen Demand [COD]	9/30/2022	Late	3/23/2023 (No Discharge)
1	BOD, 5-day, 20 deg. C	6/30/2022	Late	2/1/2023
1	pH	6/30/2022	Late	2/1/2023
1	pH	6/30/2022	Late	2/1/2023
1	Solids, total suspended	6/30/2022	Late	2/1/2023
1	Oil and grease, hexane extr method	6/30/2022	Late	2/1/2023
1	Nitrogen, ammonia total [as N]	6/30/2022	Missing	2/1/2023 (Failure to Sample)
1	Nitrite + Nitrate total [as N]	6/30/2022	Late	2/1/2023
1	Iron, total recoverable	6/30/2022	Late	2/1/2023
1	Aluminum, total recoverable	6/30/2022	Late	2/1/2023
1	Lead, total recoverable	6/30/2022	Late	2/1/2023
1	Chemical Oxygen Demand [COD]	6/30/2022	Late	2/1/2023
1	BOD, 5-day, 20 deg. C	3/31/2022	Late	3/23/2023 (No Discharge)
1	pH	3/31/2022	Late	3/23/2023 (No Discharge)
1	pH	3/31/2022	Late	3/23/2023 (No Discharge)
1	Solids, total suspended	3/31/2022	Late	3/23/2023 (No Discharge)
1	Oil and grease, hexane extr method	3/31/2022	Late	3/23/2023 (No Discharge)
1	Nitrogen, ammonia total [as N]	3/31/2022	Late	3/23/2023 (No Discharge)
1	Nitrite + Nitrate total [as N]	3/31/2022	Late	3/23/2023 (No Discharge)
1	Iron, total recoverable	3/31/2022	Late	3/23/2023 (No Discharge)
1	Aluminum, total recoverable	3/31/2022	Late	3/23/2023 (No Discharge)
1	Lead, total recoverable	3/31/2022	Late	3/23/2023 (No Discharge)
1	Chemical Oxygen Demand [COD]	3/31/2022	Late	3/23/2023 (No Discharge)
1	BOD, 5-day, 20 deg. C	12/31/2021	Missing	No Record of Submittal

1	pH	12/31/2021	Missing	No Record of Submittal
1	pH	12/31/2021	Missing	No Record of Submittal
1	Solids, total suspended	12/31/2021	Missing	No Record of Submittal
1	Oil and grease, hexane extr method	12/31/2021	Missing	No Record of Submittal
1	Nitrogen, ammonia total [as N]	12/31/2021	Missing	No Record of Submittal
1	Nitrite + Nitrate total [as N]	12/31/2021	Missing	No Record of Submittal
1	Iron, total recoverable	12/31/2021	Missing	No Record of Submittal
1	Aluminum, total recoverable	12/31/2021	Missing	No Record of Submittal
1	Lead, total recoverable	12/31/2021	Missing	No Record of Submittal
1	Chemical Oxygen Demand [COD]	12/31/2021	Missing	No Record of Submittal

Section B. Other requirements 6. of the Permit states that, “Most monitoring in this permit is benchmark monitoring. The "benchmarks" are the pollutant concentrations above which The Director determined represents a level of concern. The level of concern is a concentration at which a stormwater discharge could potentially impair or contribute to impairing water quality or affect human health from ingestion of water or fish. The benchmarks are also viewed by the DWWM as a level, that if below, a facility represents little potential for water quality concern. As such, the benchmarks also provide an appropriate level to determine whether a facility's stormwater pollution prevention measures are successfully implemented.”

“The SWPPP must be modified after the average of two consecutive samples are above the benchmark level for the sampled parameter. Based upon the modification of this plan, the selection, design, installation and implementation of any control measures at the facility may be required to ensure that all sampled parameters meet the required benchmark levels.”

Observation 9: Discharge Monitoring Report data from EPA’s ICIS database for the Facility’s Permit is included below in Table 5 for the dates of December 31, 2021 to March 31, 2023. The facility appears to have had two consecutive quarters (ending 12/31/2022 and 3/31/2023) with sampling above the benchmark for Aluminum, and it does not appear that the SWPPP was modified in response to these exceedances as required by the Permit.

Table 5. Permit No. WVG611982 DMR data from December 31, 2021 to March 31, 2023.

Outlet	Parameter Description	Monitoring End Date	Benchmark Limit (mg/L)	Facility Reported (mg/L)
1	Aluminum, total recoverable	3/31/2023	0.75	0.777
1	Aluminum, total recoverable	12/31/2022	0.75	1.14
1	Aluminum, total recoverable	9/30/2022	0.75	No Discharge
1	Aluminum, total recoverable	6/30/2022	0.75	0.655
1	Aluminum, total recoverable	3/31/2022	0.75	No Discharge
1	Aluminum, total recoverable	12/31/2021	0.75	NO DATA
1	Iron, total recoverable	3/31/2023	1.5	0.804
1	Iron, total recoverable	12/31/2022	1.5	1.77
1	Iron, total recoverable	9/30/2022	1.5	No Discharge
1	Iron, total recoverable	6/30/2022	1.5	0.877
1	Iron, total recoverable	3/31/2022	1.5	No Discharge
1	Iron, total recoverable	12/31/2021	1.5	No Data
1	Solids, total suspended	3/31/2023	100	78
1	Solids, total suspended	12/31/2022	100	118
1	Solids, total suspended	9/30/2022	100	No Discharge
1	Solids, total suspended	6/30/2022	100	65.5
1	Solids, total suspended	3/31/2022	100	No Discharge
1	Solids, total suspended	12/31/2021	100	No Data

IV. Records Review (*Refer to Attachment 1, photos DSCN3642 – 3649, DSCN3711 – DSCN3712*)

During the inspection, the EPA Inspection Team reviewed documentation including: most recently modified Stormwater Prevention, Control, and Countermeasure Plan (SPCC, Groundwater Protection Plan (GPP), 2022 employee stormwater training records, and the Site Map. Additionally, the Facility also provided a Corporate Waste Analysis Plan. The EPA Inspection Team requested the following electronic documentation on 6/12/2023: A digital copy of the most recent SWPPP (Stormwater Pollution Prevention Plan) and GPP (Groundwater Protection Plan), the two most recent corrective action reports for all benchmark exceedances on site along with the corresponding COC's/laboratory analysis for those quarters, the two most

recent quarterly Visual Monitoring, annual, and quarterly reports, Site Map, and Annual Training logs for 2020 – 2022. A request for electronic copies of these records was made by EPA to the Facility on June 12th, 2023, with a reminder request made by EPA on June 28th, 2023. A representative from Verdantas LLC emailed back on June 29th, 2023, and mentioned this request is currently being worked on. As of the writing of this inspection report, the records have not been received by EPA. Due to the digitized records not being available at the time of this report, the EPA Inspection Team can only comment on the Site Map which is a part of the Facility's SWPPP.

V. Closing Conference

After the Facility walk through, the EPA Inspection Team met with the Facility representatives for a closing conference. The EPA Inspection Team shared preliminary observations with the Facility. The EPA Inspection Team reiterated to the Facility representatives that all preliminary observations discussed were not compliance determinations. Any and all preliminary observations shared were subject to further investigation by EPA upon the additional review of records and documentation. Additional observations may be contained in this inspection report that were not identified at the time of the closing conference after EPA reviewed additional materials following the inspection.

The inspection concluded at 11:05 AM.