UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 3
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, Pennsylvania 19103-2029

Report Title:	Clean Water Act Compliance Inspection Report
Inspection Date(s):	09/12/2024
Regulatory Program(s):	National Pollutant Discharge Elimination System (NPDES)
Type of Activity:	Industrial User Inspection
Site/Facility Name:	Ascensus Specialties
Permittee:	Ascensus Specialties Callery LLC
Site/Facility Operator:	Ascensus Specialties
Site/Facility Address:	1424 Mars-Evans City Road Evans City, PA 16033
Latitude:	40.7462 **Longitude:** -80.0369
County:	Butler County
Permit Number:	PAP328941
NAICS Code:	325180 **SIC:** 2819
Unique Project #:	ECAD-497

Site/Facility Representative: **Point of Contact** ☒
Evan DeMars, Environmental Lead
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EPA Inspector:
Jim Kline
Phone: (304) 234-0263 Email: kline.james@epa.gov

James Kline Digitally signed by James Kline Date: 2024.11.25 09:22:14 -05'00'

Report Preparer Signature/Date Jim Kline (3ED32) NPDES Section 1 Date

MARK ZOLANDZ Digitally signed by MARK ZOLANDZ Date: 2024.11.25 09:29:00 -05'00'

Supervisor Signature/Date Mark Zolandz, Section Chief (3ED32) NPDES Section 1 Date

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I. Introduction

On September 12, 2024, the United States Environmental Protection Agency, Region 3 ("EPA"), conducted an onsite Industrial User Pretreatment Inspection at the Ascensus Specialties (hereinafter, "Ascensus") facility located at 1424 Mars-Evans City Road in Evans City, Pennsylvania (hereinafter, the "Facility"). The purpose of the inspection was to observe compliance with the Pretreatment Regulations of the Clean Water Act (CWA) and to verify compliance with the National Pollutant Discharge Elimination System (NPDES) and applicable State and Federal regulations. The EPA is the control authority for the Facility. The EPA lead inspector was Inspector Jim Kline (Inspector Kline). Prior to the inspection, advance notification was sent to the Pennsylvania Department of Environmental Protection (PADEP). The PADEP did not have a representative present for the inspection.

I.

A. Opening Conference

Inspector Kline arrived at Ascensus on Thursday, September 12th, 2024, at approximately 9:00AM **(See Attachment #1- Photos #1 & #2)**. Upon arrival, Inspector Kline presented his credentials to Mr. Evan DeMars, Environmental Lead and Mr. Matt Manna, Global Environmental, Health, and Safety Manager. Inspector Kline conducted an opening conference. Attending were Inspector Kline, Mr. DeMars, and Mr. Manna. Inspector Kline explained the purpose and scope of the inspection to Mr. DeMars, and Mr. Manna.

Inspector Kline requested that any information that the Ascensus deemed to be confidential business information ("CBI") should be identified during the inspection and it would be handled as CBI according to the EPA CBI procedures.

Mr. DeMars and Mr. Manna stated Ascensus dated back to 1946 and is located on a one-hundred-acre parcel with four main production areas. Mr. Manna added there are approximately ninety full-time employees at this location. Mr. DeMars added operating hours are around the clock, seven days a week.

B. Weather and Precipitation Conditions

During the inspection, the weather was sunny with temperatures in the lower 80°s Fahrenheit.

II. Facility Activity

According to Mr. Manna, Ascensus is a chemical manufacturing plant that produces various powdered chemicals for the electronics and pharmaceutical industries. Mr. Manna added there

are four Ascensus locations in the United States and one in the United Kingdom. Mr. Manna stated that Ascensus produces water-reactive potassium at this Facility.

Inspector Kline asked both Mr. DeMars and Mr. Manna if Ascensus had any type of sewer use agreement with the Evans City Water and Sewer Authority. A copy of the "Assignment of Industrial Use Sewer Agreement" was provided by Mr. DeMars **(See Attachment #2)**. Inspector Kline asked both Mr. DeMars and Mr. Manna if Ascensus discharges any of their process wastewater to the Evans City Water and Sewer Authority. Mr. DeMars stated their process control is designed not to discharge process wastewater to the Evans City Water and Sewer Authority Sewer. Mr. DeMars stated that he certifies and reports to the EPA semiannually that Ascensus has a zero-liquid discharge of process wastewater. Inspector Kline obtained a copy of the most recent biannual report dated July 9, 2024, that self-certified no-discharge **(See Attachment #3)**. Mr. DeMars added that ACV Environmental uses a vacuum truck to remove generated residual wastes from their process. Inspector Kline requested and received waste manifests for residual wastes removed in 2024 **(See Attachment #4)**, 2023 **(See Attachment #5)**, and 2022 **(See Attachment #6)**.

Inspector Kline asked both Mr. DeMars and Mr. Manna if Ascensus had any type of process flow diagram for the various processes. Mr. DeMars Provided Inspector Kline a copy of the process flow for Ascensus **(See Attachment #7)**. Inspector Kline asked Mr. DeMars to describe wastewater generated of the processes at Ascensus. Mr. DeMars stated wastewater is intermittently generated from each of the departments for maintenance and irregular circumstances (i.e. process shutdowns, tank entry, etc.) adding these events were not common and any and all process-generated wastewater is tested through their quality department and verified by Mr. DeMars before being authorized to transfer to the elementary neutralization unit (ENU)/wastewater pretreatment facility (WWPF) on site. According to Mr. DeMars, these occurrences are documented and catalogued with the testing results and total volume. The water is checked for its percentage of organic solvents as well as its total organic carbon (TOC). If the sample is < 5% organic solvent, < 3.33% TOC, and withing acceptable pH ranges the rinse will be recorded and approved before sent to the ENU for pH adjustment.

Mr. DeMars provided the following description for the Alcoholates process:
The alcoholates department generates wastewater designated to the WWPF from its pack off and cleaning processes. Wastewater is generated from rinsing the dust collector/emptying of the pack-off scrubber hoods in Building 44 at the pack-off station. Once a water rinse is completed at Alcoholates, a sample is taken for analysis and approval. Another process that generates wash water from the Alcoholates department is from the Rosedale filter cartridges. These are processing filters that are first rinsed with solvent (which becomes a separate waste stream), and then the filters go for a second round of deactivation treatment at our building 28 steam hood, where the filters are washed with high purity steam. The resulting water wash is sent to the WWPF ENU for pH adjustment.

Mr. DeMars provided the following description for the Boranes process:

> The boranes department generates wastewater from several activities. The first process that generates wastewater to the WWPF is from rinsing diborane cylinders. After diborane

cylinders are used / emptied or returned from customers, the cylinders are rinsed using water to remove residual material. This resulting solution is mostly water with low pH sodium hydroxide and residual organic compounds. A sample is taken from these cylinder rinses for analysis and approval before sending to the ENU. Similarly, the boranes department also generates wastewater from the washing of its reactors, cylinders, and sample containers. This borane containing wastewater follows the same process of sampling for TOC and pH before being designated to send to the ENU for pH correction.

Mr. DeMars provided the following description for the Alkali Metals process:
The alkali metal generation process generates wastewater that is sent to the WWPF both while the generation process is running, and during column shutdown when the system is being deactivated and prepped for its next cycle. While the alkali metal process is running, captured vapor from the furnace (residual sodium and potassium) is collected via the mixed oxygen (MOx) scrubber system and sent to the ENU. Daily pH and water hardness is recorded. Separately, the MOx equipment used in the process such as the salt pot and salt trap are deactivated using high purity steam once the alkali metal generation run is complete. The steam-out of the equipment deactivates residual sodium and potassium leftover in the equipment and is sent to the ENU for pH correction. MOx also generates wastewater while washing the packing material in the MOx distillation column during shutdown periods. The packing media from the column is deactivated in this washing process to remove residual sodium and potassium built up in the column media. This washout also is sent to the ENU / WWPF for pH adjustment.

Mr. DeMars provided the following description for the On-Site Process Wastewater treatment:
Part of the WWPF is made up of the ENU, which is a registered tank subject to 25 PA 287.102 Permit-By-Rule to neutralize outgoing wastewater from the facility. The ENU operates using sulfuric acid chemical addition to neutralize the wastewater into discharge permissible limits before the water moves along the WWPF system.

Inspector Kline asked if any process wastewater is discharged to the Evans City Water and Sewer Authority. Mr. DeMars stated no process wastewater is discharged. Inspector Kline asked Mr. DeMars if Ascensus conducts any sampling of the process wastewater. Mr. DeMars stated that Mr. Brady Moorehouse, Utility Technician, operates their wastewater treatment and collects samples for third party analysis. Mr. DeMars stated Mr. Moorehouse does in-house pH monitoring. Inspector Kline randomly requested results for the sampling event that occurred on January 3, 2024. Mr. DeMars provided an analytical report prepared by Pace Analytical Services **(See Attachment #8)**. Inspector Kline was introduced to Mr. Moorehouse. Inspector Kline asked Mr. Moorehouse to describe his work related to pH monitoring. Mr. Moorehouse stated he conducts weekly three-point pH calibration using the 4, 7, and 10 buffer solutions, and he maintains a daily monitoring log in the Wastewater Treatment Building (Building #45).

According to both Mr. DeMars and Mr. Manna, Ascensus has permit coverage under PADEP's NPDES General Permit for Discharges of Stormwater Associated with Industrial Activity (PAG-03) and a PADEP-issued Synthetic Minor Air Permit. Mr. DeMars stated Ascensus is also a Large Quantity Generator of Hazardous Wastes.

III. Observations

Inspector Kline conducted a tour of Ascensus. Accompanying Inspector Kline along on the tour were Mr. DeMars and Mr. Manna.

Observation #1: The first building entered was Building #64, which is the control room.

Observation #2: Inspector Kline, Mr. DeMars, and Mr. Manna met Mr. Moorehouse in Building #45 – Wastewater Treatment Building. Inspector Kline requested to see the buffer solutions used for pH calibration **(See Attachment #1- Photo #3)**. All buffer solutions were within expiration dates.

Observation #3: While in Building #45 – Wastewater Treatment Building, Inspector Kline requested to see the Daily Monitoring Log **(See Attachment #1- Photo #4)**.

Observation #4: While in Building #45 – Wastewater Treatment Building, Inspector Kline observed the monitoring meter for Equalization Tank #1. The meter indicated the current capacity reading was 27,927 gallons with 0 gallons of flow discharge **(See Attachment #1- Photo #5)**.

Observation #5: Located outside and to the south of Building #45 – Wastewater Treatment Building, Inspector Kline observed the sample tank. The sample tank was buried with a closed ground-surface access door **(See Attachment #1- Photo #6)**. Inspector Kline requested the access door be opened **(See Attachment #1- Photo #7)**. Inspector Kline observed the interior of the tank **(See Attachment #1- Photo #8)**. Inspector Kline did not visually see any fluid movement into or out of the tank.

Observation #6: Inspector Kline randomly selected and toured Buildings #24 and #34. Inside Building #34, Inspector Kline toured the Quality Lab, Room #14. Mr. DeMars and Mr. Manna accompanied in these areas.

This concluded the physical inspection portion of Ascensus.

IV. Records Review

In preparation for this inspection, Inspector Kline reviewed the biannual non-discharge certification letters submitted to the EPA since July 2021. In total, there were six letters which indicated Ascensus did not discharge industrial wastewaters to the Evans City Water and Sewer Authority.

Inspector Kline completed the Industrial User Checklist with input from Mr. DeMars and Mr. Manna **(See Attachment #9)**.

V. Closing Conference

Inspector Kline conducted a closing conference with Mr. DeMars and Mr. Manna. Inspector Kline shared preliminary observations about the facility. Inspector Kline reiterated that all the preliminary observations discussed were not compliance determinations. Any and all preliminary observations shared are subject to further investigation by EPA staff upon the additional review of records and documentation. Additional observations may be contained in this inspection report and the attachments that were not identified at the time of the closing conference.

The inspection concluded at approximately 2:25PM.

VI. Follow-up Communications

Inspector Kline received an e-mail from Mr. DeMars on 9/12/2024 and 11/7/2024. In both e-mails, Mr. DeMars provided Inspector Kline with information requested during the inspection.

VII. List of Attachments

Attachment 1: Photographs
Attachment 2: Industrial Sewer Use Service Agreement
Attachment 3: Semi-Annual Compliance Report
Attachment 4: 2024 Waste Manifest
Attachment 5: 2023 Waste Manifest
Attachment 6: 2022 Waste Manifest
Attachment 7: Ascensus- Process Flow Diagram
Attachment 8: Analytical Report (January 2024)
Attachment 9: IU Checklist