

Region 6 - Enforcement & Compliance Assurance Division

INSPECTION REPORT

Inspection Date(s):	04/24-28/2023	
Media Program:	RCRA Compliance Evaluation Inspection	
Regulatory Program(s)	RCRA Large Quantity Generator	
Company Name:	Monument Chemical	
Facility Name:	Monument Chemical	
Facility Physical Location:	16717 Jacintoport Blvd	
(city, state, zip code)	Houston, TX, 77015	
Mailing address:	16717 Jacintoport Blvd	
(city, state, zip code)	Houston, TX, 77015	
County/Parish:	Harris County	
Facility Phone Number	(281) 452-5951	
Facility Contact:	Narayan Dave	Environmental Manager
	ndave@monumentchemical.com	
FRS Number:	NA	
Identification/Permit Number:	NA	
Media Identifier Number:	TXD096037932	
NAICS:	325199 – All Other Basic Organic Chemical Manufacturing	
SIC:	NA	
Personnel participating in inspection:		
Sandesh Thapa	EPA Region 6 (ECDSR)	Lead Inspector
John Penland	EPA Region 6 (ECDSR)	Lead Inspector
Narayan Dave	Monument Chemical	Environmental Manager
Guillermo Urrutia	Monument Chemical	Health, Safety, Security and Emergency Services Specialist
EPA Lead Inspector Signature/Date		7/14/2023
	Sandesh Thapa – Lead Inspector	Date
Supervisor Signature/Date		
	Jeffrey Yurk – Waste Section Chief	Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

During the week of April 24, 2023, I, Sandesh Thapa, conducted an unannounced inspection of the Monument Chemical (Monument) facility located at 16717 Jacintoport Blvd, Houston, TX for compliance with the Resource Conservation and Recovery Act (RCRA). I was assisted on this inspection by Environmental Protection Agency (EPA) senior inspector John Penland. The inspection included a walkthrough of the facility's production, waste generation, and management units and a review of the facility records related to hazardous waste management.

The Monument facility was targeted for inspection as part of facilities located in Environmental Justice communities and Regional and National investigation initiatives to evaluate facilities subject to RCRA Subpart AA, BB and CC regulations related to air emissions from hazardous waste management units.

We concluded the inspection of the Monument facility on April 28, 2023, with a closing conference where we presented our provisional areas of concern.

This report serves as documentation of all onsite activities and observations during the inspection of the Monument facility. Photographs taken during the inspection to document onsite observations are included in Appendix 1. A summary of all areas of concern identified during the inspection is provided in Section III.

FACILITY DESCRIPTION

Monument is located at 16717 Jacintoport Blvd in Houston, TX. It engages in the commercial production of organic solvents, intermediates and polyols. The facility is operational 24 hours a day, seven days a week. The Monument facility was issued the EPA ID# TXD096037932. Monument has been operating as a Large Quantity Generator (LQG) of hazardous waste since March 1990.

The facility operates under Clean Air Act under Title V permit #6283 issued by the Texas Commission on Environmental Quality (TCEQ).

A general map of the plant is included in Appendix 2. A process flow diagram is included in Appendix 3.

Section II – OBSERVATIONS

We conducted the onsite inspection during normal business hours from April 24-28, 2023. During the inspection, the facility was conducting normal operations and all areas of the facility were in use. Throughout the week, we visited the facility's waste generation, accumulation, and management areas. We also reviewed the facility's operating records pertaining to the facility's RCRA applicability and compliance requirements.

This section provides an abbreviated description of our daily activities; see Appendix 4. Appendix 1 provides photographs of our observations. Unless otherwise specified, the statements cited in this section reflect those claims made by facility personnel or documents reviewed during the inspection.

April 24, 2023

John Penland and I entered the facility at 9:45 AM. We presented our credentials to Mr. Dave and informed him that we were there to conduct an inspection of the facility under Section 3007 of the Resource Conservation and Recovery Act (RCRA). I also explained the right of Monument to assert a Confidential Business Information claim for records requested by the EPA. This discussion was followed by a presentation of EPA Region 6's Confidentiality Notice (40 CFR Section 2.203). Following this introduction, we conducted an inspection opening briefing with Narayan Dave. This included daily inspection schedules and a request for compliance records.

Following the opening briefing, we conducted a safety brief and a walkthrough of Monument's production and associated waste management areas. The walkthrough began in the Tank Farms area of Monument's facility. Narayan Dave, the Environmental, Health and Safety Manager for Monument, accompanied us on the walkthrough.

Facility Walkthrough

Tank Farm 1

Six tanks are located at Tank Farm 1 which includes Tanks 119, 120, 121, 122, 123 and 124. Each has a capacity of 15,000 gallons. We observed that tank labeling was barely visible or nonexistent. (Appendix 1, Photos 1-3) We were told that Tank 119 is used to contain hazardous waste, however this tank was not labeled with a hazardous waste label. (Appendix 1, Photo 4)

Tank Farm 2

Five tanks are located at Tank Farm 2 which includes Tanks 204, 207, 208, 210 and 211. We observed that Tanks 204, 207, 208 and 211 contained hazardous waste without proper labels. (Appendix 1, Photo 5 & 6). In addition, Tank 204 has been operating without registration since March 28, 2012. We noticed Tank 211 Pressure Relief Valve (PRV) had a work order in place for a release. We inspected all PRV's of Tank Farm 1 and Tank Farm 2. We used the photoionization detector provided by the facility. No readings were of concern and closure devices appeared to be secured in the closed positions (Appendix 1, Photo 15)

We observed an active spill being contained using synthetic sorbent pads at the base of tank 211. (Appendix 1, Photos 6-7).

Central Accumulation Area (CAA)

All drums located at the CAA were properly managed. However, we saw multiple five-gallon buckets of waste staged next to the CAA of not yet designated as hazardous waste and non-hazardous waste. They were collected from different points of generation within the facility. We informed the facility that a waste determination should be done at the source of generation. (Appendix 1, Photo 9).

Satellite Accumulation Area (SAA)

We observed a hazardous waste drum with an unsecured bung at the SAA. (Appendix 1, Photos 10-11).

Laboratory Walkthrough

We observed an unlabeled plastic container used for satellite collection of waste from the gas chromatography analyzer. The facility corrected the issue during the inspection. (Appendix 1, Photo 12) We departed Monument facility at 3:15 PM.

April 25, 2023

John Penland and I entered the facility at 9:27 AM. We reviewed our notes from April 24, 2023 with the facility representatives. The majority of the day we conducted preliminary document reviews and facility process overview.

Document Review

We were provided the tank inventory which contained 202 items including location, volume, content, and status. We discussed the list of tanks with the facility and which tanks manage hazardous waste and the associated waste codes. We received confirmation on the inactive status of Tank 204 and identified tanks to inspect on April 26, 2023. We also discussed historical waste codes still showing up on their State Registration.

Facility Process Overview

Monument provided a summary of the Isopropyl alcohol (IPA) production process. Monument uses acetone as a raw material which undergoes hydrogenation to produce IPA. As a result, different chemicals and derivatives are produced along with the IPA. In the process, hazardous waste is generated as mixed organics.

Additionally, Monument uses catalyst made of copper/zinc and nickel used in the process of dehydrogenation of Tetralin to Decalin. The spent catalyst is sent to recycling facility, Alpha Omega for reclamation of the metals.

We departed Monument facility at 2:45 PM.

April 26, 2023

John Penland and I entered the facility at 9:25 AM. We reviewed our notes from April 25, 2023, with facility representatives. The facility mentioned that they sent the registration update to TCEQ for Tank 204 on April 25, 2023.

We discussed their Clean Air Act (CAA) permit, and how RCRA Subpart BB applies to equipment in hazardous waste service or waste otherwise subject to the requirements of 40 CFR 265 Subpart J (i.e., tanks under 40 CFR 262.17 or 30 TAC 335.262).

Under RCRA regulation 40 CFR 265.1064(m) facilities subject to the requirements of Subpart BB are required to document compliance with applicable New Source Performance Standards (NSPS) or National Emissions Standards for Hazardous Air Pollutants (NESHAP) standards in lieu of Subpart BB requirements. However, these CAA standards must be incorporated into a federally enforceable permit. Monument provided its active title V permit #01596.

Facility Walkthrough

Wastewater Treatment Unit (WTU):

The WTU includes Tank 561 (WTU1), Tank 562 (WTU2) and Tank 563 (Equalization Tank). Processed wastewater is stored in tanks 140, 206, 303 and 164, however, the facility needs to verify the contents of these tanks. Wastewater from tanks C301A, 316, 216 and 317 are discharged to POTW. The WTU is inspected yearly by Gulf Coast Water Authority. We found a spill of unknown white substance at WTU1. Monument claimed it to be a caustic soda. (Appendix 1, Photo 16).

Reclaimed Material

We were informed that a few processes generate mixed organics, which are sent out to be used as cutter stock. Based on the Legitimate Fuels Demonstration document provided by the Monument, the material is collected from column heads and remaining residuals in the column after the campaign is complete. Monument target is greater than 8000 BTU/lb for the material.

We departed Monument facility at 12:00 PM.

April 27, 2023

John Penland and I entered the facility at 9:30 AM. We conducted our preliminary document review, including reviewing our notes from April 26, 2023. We received an update that tanks 140, 216, 303, 504 and 561 contain processed wastewater and tank 206 is empty.

Facility Walkthrough

We conducted another walkthrough of Tank Farm 1 and 2 and we were told tank 210 in Tank Farm 2 and 119 in Tank Farm 1 contained hazardous waste. No issues were found with the tanks. These tanks have dedicated pumps that use filters. Evaluation of the filters as a managed waste, once removed, is required. We observed a gaps and cracks in the secondary containment area of Tank Farm2. (Appendix 1, Photo 13-14)

We departed Monument facility at 2:40 PM.

April 28, 2023

John Penland and I entered the facility at 9:30 AM. We discussed a facility analysis report of a sample collected from Tank 140 from the WTU. The sample had a pH of 5.0 and 98.4 percent moisture which satisfies the definition of wastewater 40 CFR 268.2 (f).

I facilitated a closeout meeting at 11:00 AM to review my observations and established a timeline for document submittal.

We departed the facility at approximately 12:00 PM.

Section III – AREAS of CONCERN

The following is a list of potential areas of concern discussed with the facility representatives during the closeout meeting.

- The facility was using Tank 204 to manage hazardous waste without active registration. State records show it was deactivated on March 28, 2012.
- We observed a hazardous waste drum with an open bung at the SAA which was corrected immediately by Monument (40 CFR 262.15(4)).
- We observed gaps and cracks in the secondary containment area at Tank Farm 2. The facility has reported on May 12, 2023 that the repairs of secondary containment area is close to completion (40 CFR 265.193(e)(iii)).
- We observed that the facility failed to properly label a container in the laboratory and hazardous waste tanks 119, 122, 123, 124, 204, 207, 208 and 211 with appropriate hazardous waste labeling. The facility added the labeling during the inspection (40 CFR 262.17(a)(5)(i) and (ii)).

- Further investigation is required to rule out the possibility of hazardous waste spill at WTU1 and from Tank 211 and within the secondary containment of Tank Farm 2.
- Characterization and management of tank filters is a pending concern.
- We observed multiple buckets staged near CAA that were not characterized at the point of generation or labeled as either hazardous or non-hazardous waste (40 CFR 262.11).

Section IV – FOLLOW UP

The following information was received by EPA, after exiting the facility on April 28, 2023.

- Waste Tank Vp's and PRV.
- Process diagram of Wastewater Treatment System.
- Contingency Plan with Quick Reference Guide.
- Legitimate Fuel Demonstration Document.
- Facility Diagram.
- Tank Integrity Assessment and Diagram.
- Training Documentation (In-Plant Training).
- Less than 90 Day inspection.
- Weekly Drum Slab Inventory.
- RCRA Tank Analysis Report.

Section V – LIST OF APPENDICES

Appendix 1 – Photo Log

Appendix 2 – Facility Diagram

Appendix 3 – Process Flow Diagram

Appendix 4 – EPA Daily Summary E-mails

Appendix 1

Photograph Log



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 1

Location: Monument Chemical , 16717 Jacintoport Blvd		
City: Houston	County/Parish: Harris	State: Texas



Photo #:	DSCN1014
Date:	04/26/2023
Camera:	Nikon COOLPIX AW120
Photographer:	John Penland
Witness:	Sandesh Thapa and John Penland
Description: Tank Farm 1: Trace of Hazardous waste label at tank 123.	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 2

Location: Monument Chemical , 16717 Jacintoport Blvd		
City: Houston	County/Parish: Harris	State: Texas



Photo #:	DSCN1015
Date:	04/26/2023
Camera:	Nikon COOLPIX AW120
Photographer:	John Penland
Witness:	Sandesh Thapa and John Penland
Description: Tank Farm 1: Trace of Hazardous waste label at tank 124.	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 3

Location: Monument Chemical , 16717 Jacintoport Blvd		
City: Houston	County/Parish: Harris	State: Texas



Photo #:	DSCN1016
Date:	04/26/2023
Camera:	Nikon COOLPIX AW120
Photographer:	John Penland
Witness:	Sandesh Thapa and John Penland
Description: Tank Farm 1: Hazardous waste labels on Tank units- worn and not maintained	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 4

Location: Monument Chemical , 16717 Jacintoport Blvd		
City: Houston	County/Parish: Harris	State: Texas



Photo #:	DSCN1018
Date:	04/26/2023
Camera:	Nikon COOLPIX AW120
Photographer:	John Penland
Witness:	Sandesh Thapa and John Penland
Description: Tank Farm 1: Closeup view of Tank 119 which contains Hazardous Waste but is not labeled.	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 5

Location: Monument Chemical , 16717 Jacintoport Blvd		
City: Houston	County/Parish: Harris	State: Texas



Photo #:	DSCN1021
Date:	04/24/2023
Camera:	Nikon COOLPIX AW120
Photographer:	John Penland
Witness:	Sandesh Thapa and John Penland
Description: Tank Farm 2: Hazardous waste Tank 204 without proper label.	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 6

Location: Monument Chemical , 16717 Jacintoport Blvd		
City: Houston	County/Parish: Harris	State: Texas



Photo #:	DSCN1024
Date:	04/24/2023
Camera:	Nikon COOLPIX AW120
Photographer:	John Penland
Witness:	Sandesh Thapa and John Penland
Description: Tank Farm 2: Close view of Hazardous waste Tank 211	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 7

Location: Monument Chemical , 16717 Jacintoport Blvd		
City: Houston	County/Parish: Harris	State: Texas



Photo #:	DSCN1023
Date:	04/24/2023
Camera:	Nikon COOLPIX AW120
Photographer:	John Penland
Witness:	Sandesh Thapa and John Penland
Description: Tank Farm 2: Rear view of Hazardous waste Tank 211 showing spill of waste.	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 8

Location: Monument Chemical , 16717 Jacintoport Blvd		
City: Houston	County/Parish: Harris	State: Texas



Photo #:	DSCN1022
Date:	04/24/2023
Camera:	Nikon COOLPIX AW120
Photographer:	John Penland
Witness:	Sandesh Thapa and John Penland
Description: Tank Farm 2: Hazardous waste Tank 207 and Tank 211 without proper label.	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 9

Location: Monument Chemical , 16717 Jacintoport Blvd		
City: Houston	County/Parish: Harris	State: Texas



Photo #:	DSCN1026
Date:	04/24/2023
Camera:	Nikon COOLPIX AW120
Photographer:	John Penland
Witness:	Sandesh Thapa and John Penland
Description: Waste buckets staged near CAA without labeling to indicate waste as hazardous or non-hazardous	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 10

Location: Monument Chemical , 16717 Jacintoport Blvd		
City: Houston	County/Parish: Harris	State: Texas



Photo #:	DSCN1029
Date:	04/24/2023
Camera:	Nikon COOLPIX AW120
Photographer:	John Penland
Witness:	Sandesh Thapa and John Penland
Description: Hazardous waste container at SSA without properly secured bung	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 11

Location: Monument Chemical , 16717 Jacintoport Blvd		
City: Houston	County/Parish: Harris	State: Texas

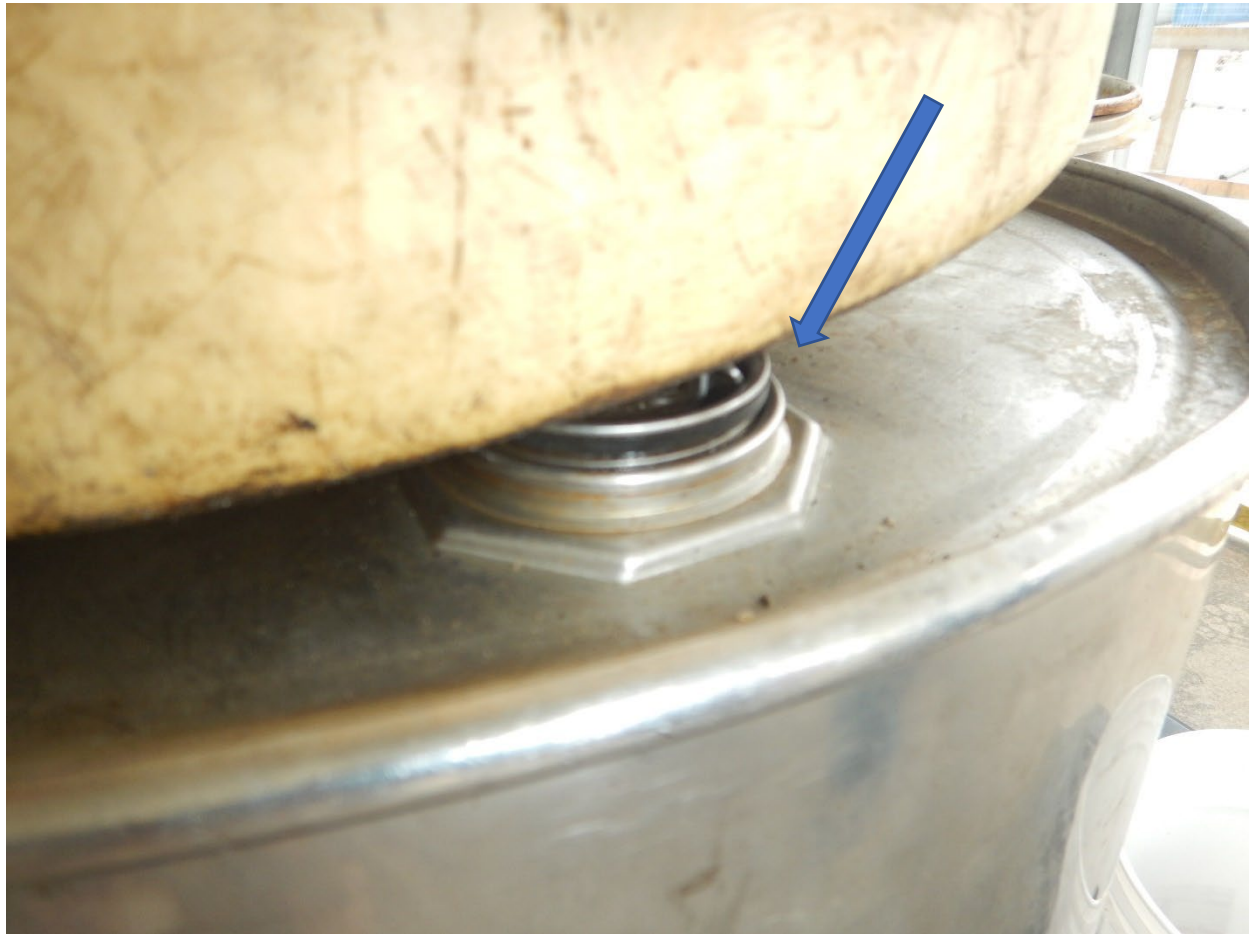


Photo #:	DSCN1030
Date:	04/24/2023
Camera:	Nikon COOLPIX AW120
Photographer:	John Penland
Witness:	Sandesh Thapa and John Penland
Description: Closeup View of Hazardous waste container at SSA without properly secured bung	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 12

Location: Monument Chemical , 16717 Jacintoport Blvd		
City: Houston	County/Parish: Harris	State: Texas

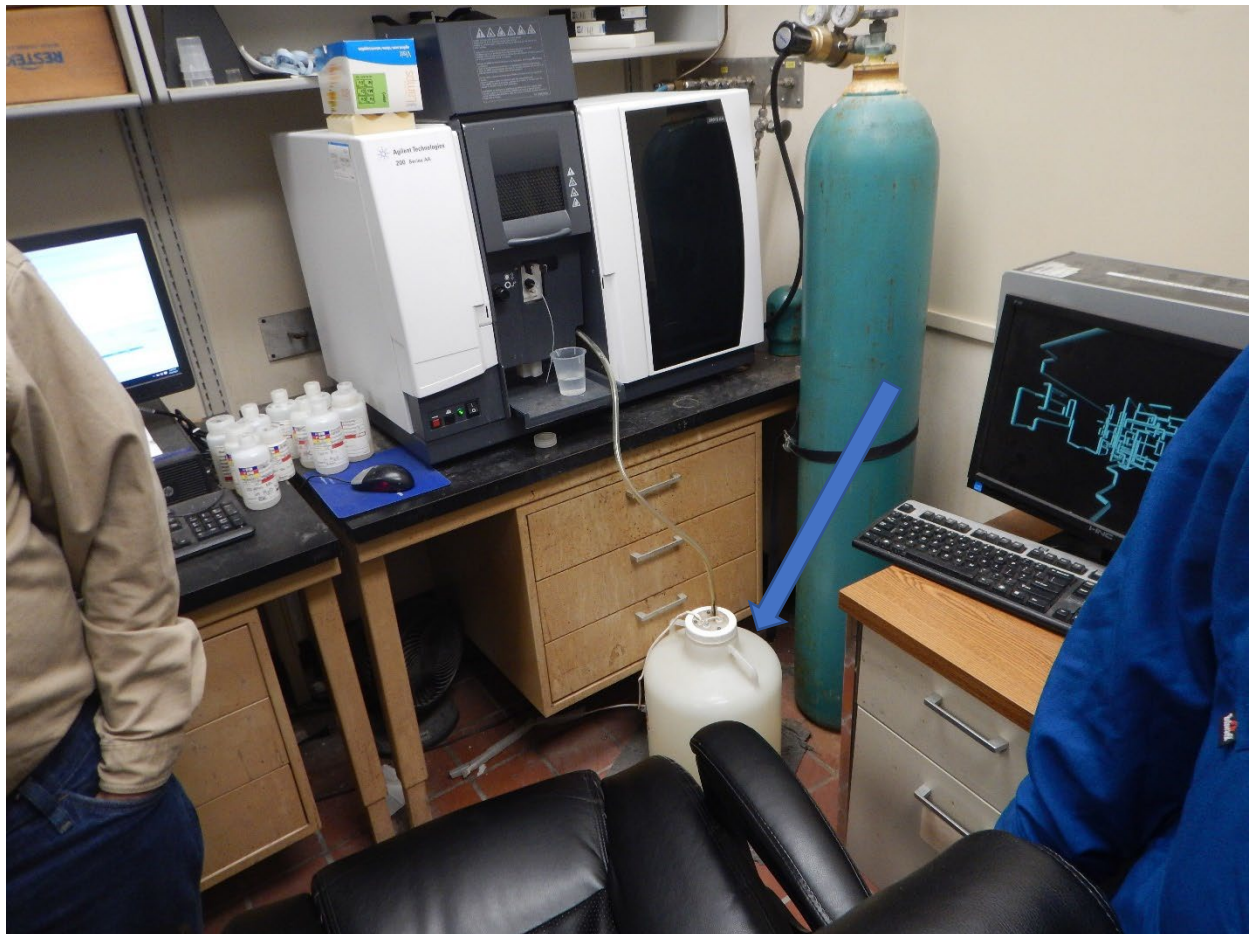


Photo #:	DSCN1031
Date:	04/24/2023
Camera:	Nikon COOLPIX AW120
Photographer:	John Penland
Witness:	Sandesh Thapa and John Penland
Description: Unlabeled satellite hazardous waste container in the laboratory.	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 13

Location: Monument Chemical , 16717 Jacintoport Blvd		
City: Houston	County/Parish: Harris	State: Texas



Photo #:	DSCN1032
Date:	04/26/2023
Camera:	Nikon COOLPIX AW120
Photographer:	John Penland
Witness:	Sandesh Thapa and John Penland
Description: Overview of Secondary Containment Area associated with Tank Farm 2. Cracks and wearing observed.	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 14

Location: Monument Chemical , 16717 Jacintoport Blvd		
City: Houston	County/Parish: Harris	State: Texas



Photo #:	DSCN1033
Date:	04/26/2023
Camera:	Nikon COOLPIX AW120
Photographer:	John Penland
Witness:	Sandesh Thapa and John Penland
Description: Closeup view of Secondary Containment Area located at Tank Farm 2 and spill being cleaned up	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 15

Location: Monument Chemical , 16717 Jacintoport Blvd		
City: Houston	County/Parish: Harris	State: Texas



Photo #:	DSCN1035
Date:	04/26/2023
Camera:	Nikon COOLPIX AW120
Photographer:	John Penland
Witness:	Sandesh Thapa and John Penland
Description: Top view of Tank 207 where monitoring of vents was conducted.	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 16

Location: Monument Chemical , 16717 Jacintoport Blvd		
City: Houston	County/Parish: Harris	State: Texas



Photo #:	DSCN1037
Date:	04/26/2023
Camera:	Nikon COOLPIX AW120
Photographer:	John Penland
Witness:	Sandesh Thapa and John Penland
Description: Spill of white substance at WWT 1 – claimed to be caustic soda by facility representative.	

Appendix 2

Facility Diagram

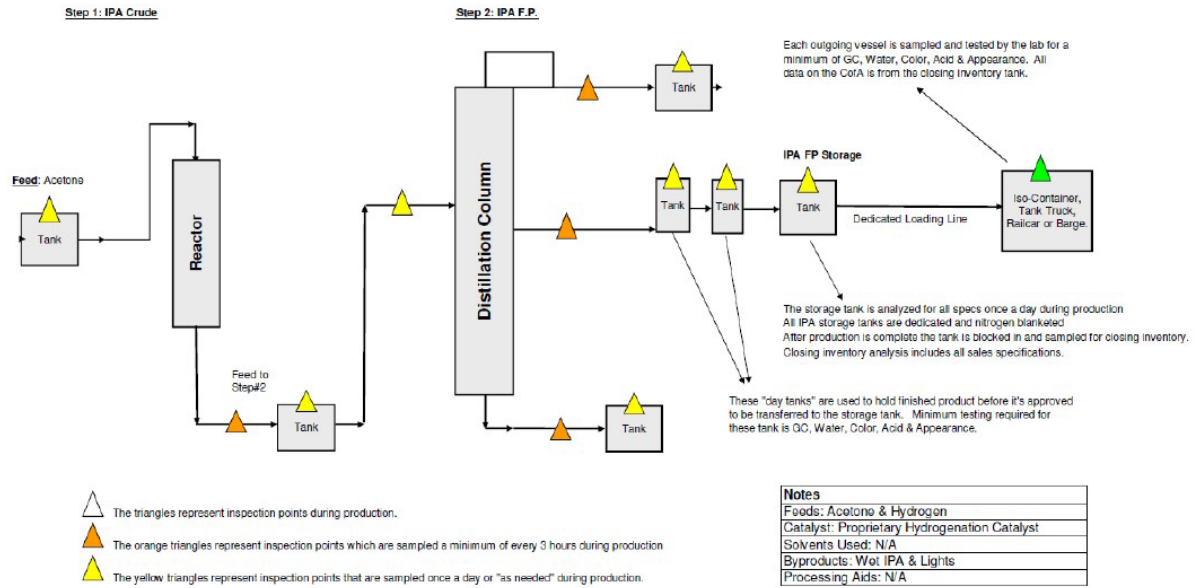
Map of Hazardous Waste Storage Locations (40 CFR 262.262(b)(4))



Appendix 3

Process Flow Diagram

IPA-USP Process Overview



Appendix 4

EPA Daily Summary E-mails

From: [Thapa, Sandesh](#)
To: [Penland, John](#); ndave@monumentchemical.com
Cc: [Yurk, Jeffrey](#)
Subject: Daily Summary of FY2023 RCRA CEI : Monument Chemical - Houston, TX (TXD096037932) - April 24, 2023
Date: Monday, April 24, 2023 10:34:00 PM

Hi All,

Here is a summary from today's inspection. If there are any error or omissions, please let me know.

Introduction

During the week of April 24, 2023, I, Sandesh Thapa, will be conducting an unannounced inspection of the Monument Chemical facility located at 16717 Jacintoport Blvd in Houston, Texas for compliance with the Resource Conservation and Recovery Act (RCRA). I will be assisted on this inspection by Environmental Protection Agency (EPA) inspector John Penland. The inspection will include walkthroughs of the facility's hazardous waste generation and management units; a review of the facility records related to hazardous waste management; and a specific evaluation of the facility's compliance with the RCRA requirements for recyclable materials.

Inspection Attendees:

NAME	TITLE	REPRESENTING	PHONE	EMAIL
John Penland	Lead Hazardous Waste Inspector	US EPA Region 6	214-665-9717	Penland.john@epa.gov
Sandesh Thapa	Asst. Hazardous Waste Inspector	US EPA Region 6	214-665-2265	thapa.sandesh@epa.gov
Guillermo Urrutia	Health, Safety, Security and Emergency Services Specialist	Monument Chemical	832-863-8831	gurrutia@monumentchemical.com
Narayan Dave	Global Environmental Health and Safety Manager	Monument Chemical		ndave@monumnetchemical.com

Daily Summary

- Initial Entry to the facility - approximately 09:15am
- Opening meeting start – 09:45am

- I presented my credentials to Mr. Narayan Dave and informed him that we were there to conduct an inspection of the facility under the authority of section 3007 of the Resource Conservation and Recovery Act
- We discussed the authority for the inspection – RCRA Section 3007 - For purposes of developing or assisting in the development of any regulation or enforcing the provisions of this chapter, any person who generates, stores, treats, transports, disposes of, or otherwise handles or has handled hazardous wastes shall, upon request of any officer, employee or representative of the Environmental Protection Agency, duly designated by the Administrator, or upon request of any duly designated officer, employee or representative of a State having an authorized hazardous waste program, furnish information relating to such wastes and permit such person at all reasonable times to have access to, and to copy all records relating to such wastes. For the purposes of developing or assisting in the development of any regulation or enforcing the provisions of this chapter, such officers, employees or representatives are authorized—
 - (1) to enter at reasonable times any establishment or other place where hazardous wastes are or have been generated, stored, treated, disposed of, or transported from;
 - (2) to inspect and obtain samples from any person of any such wastes and samples of any containers or labeling for such wastes.
- We discussed the purpose of EPA’s inspection – Assessment of Monument Chemical’s compliance with its requirements under RCRA, including, but not limited to, the requirements for: waste determination and counting; waste marking; waste container management; use of the hazardous waste manifest; emergency planning; personnel training; air pollution control requirements for hazardous waste units; and the requirements for the management of excluded or exempt materials.
- Discussed the right of Monument Chemical to assert a Confidential Business Information claim for records requested by EPA (see attachment)
- Discussed the process for transferring electronic records – EPA has set up a Microsoft OneDrive folder with access limited to the inspection participants.
 - One Drive Link: [RCRA Monument Chemical](#)
- Discussed the inspection process – the inspection will be conducted April 24, 2023, through April 28, 2023. The participants will meet at the facility at 9:00am each day to conduct the onsite portion of the inspection and discuss the findings of the ongoing records review. The records review will be conducted by the inspectors independently offsite throughout the week. Daily summaries will be provided by the inspectors at the end of each day to ensure a clear communication of questions and findings. The meeting Friday, April 28, 2023, will be reserved for a closing conference, where EPA will summarize the overall findings of the inspection to that point and provide a plan for concluding any unfinished evaluation.

- General Facility Process – The Monument Chemical is a chemical manufacturing facility involved with production of organic solvents, intermediates and polyols.
- Initial request for compliance records, including:
 - Hazardous waste notification form: 8700-12 or equivalent
 - A current Hazardous Waste Contingency Plan including records of distribution
 - Facility Maps identifying solid waste management units. Facility SOPs related to the generation or management of hazardous waste.
 - Facility waste profiles for any solid waste generated since 2020. Include documentation relevant to the waste determination made for each waste (i.e. analytical reports or documentation to support generator knowledge; see 40 CFR 262.11(f))
 - Any currently effective contract or agreement between the facility and any waste management company or TSD for disposition of waste generated by the facility.
 - Facility SOPs related to the generation or management of hazardous waste.
 - RCRA Unit inspection records since 2020 for tanks and container storage areas.
- Facility Walkthrough
 - Beginning at approximately 11:15 AM
 - Tank Farms
 - Tank Farm 1
 - There were six tanks located at Tank Farm 1 which included tank numbers 119, 120, 121, 122, 123 and 124 . Each of them has a capacity of 15K gallons.
 - Tanks 119 and 120 were used for wastewater treatment (WWT).
 - Awaiting inventory list and confirmation of the content of the in the tanks.
 - Tank Farm 2
 - There were five tanks located at Tank Farm 2 which were used for hazardous waste management, product storage and WWT.
 - Tank 204 contains propionic acid. However, in the SWR it is listed as inactive.
 - Tank 211 contains mixed organic product.
 - Tanks 210 is used as WWT.
 - Tank 207 contains recyclable waste and Tank 208 is empty.
 - Central Accumulation Area (CAA)
 - All the drums located in the CAA were closed and labelled appropriately. However, there were multiple drums staged next to the CAA for separation of hazardous and non-hazardous waste. We informed the facility that the waste determination should be done at the source of

generation.

- Laboratory Walkthrough
 - No issues
- Satellite Accumulation Area (SAA)
 - During our inspection, we found a Hazardous waste drum with an unsecured lid.
- Daily Wrap up meeting
- Departed Facility at approximately 3:15pm

Planned activities for April 24, 2023

- Process walkthrough
 - Production of organic solvents, intermediates and polyols
 - Wastewater management
 - This discussion will include:
 - Inventory of tanks and its contents
 - Management of hazardous waste generated from the processes.

Sandesh Thapa
Physical Scientist
Enforcement and Compliance Assurance Division

U.S. EPA Region 6 1201 Elm St, Suite 500

Dallas, TX 75270

Office: 214-665-2265

From: [Thapa, Sandesh](#)
To: [Penland, John](#); [Dave, Narayan](#)
Subject: Daily Summary of FY2023 RCRA CEI : Monument Chemical - Houston, TX (TXD096037932) - April 25, 2023
Date: Tuesday, April 25, 2023 10:02:00 PM

Hi All,

Here is a summary from today's inspection. If there are any error or omissions, please let me know.

Inspection Attendees:

NAME	TITLE	REPRESENTING	PHONE	EMAIL
John Penland	Lead Hazardous Waste Inspector	US EPA Region 6	214-665-9717	Penland.john@epa.gov
Sandesh Thapa	Asst. Hazardous Waste Inspector	US EPA Region 6	214-665-2265	thapa.sandesh@epa.gov
Guillermo Urrutia	Health, Safety, Security and Emergency Services Specialist	Monument Chemical	832-863-8831	gurrutia@monumentchemical.com
Narayan Dave	Global Environmental Health and Safety Manager	Monument Chemical		ndave@monumnetchemical.com

Daily Summary

- Inspection Start: 09:27am
- Follow up from April 24, 2023, Daily Summary
 - We received confirmation on inactive status of Tank 204 in SWR.
 - Tank 211 PRV - work order in progress to fix the minor release (no issue).
 - Corrections:
 - Tank 207 contains RecVAM, bottom
 - We found an unlabeled container used for satellite collection inside the laboratory which was corrected on the spot.
- Process Overview

Monument Chemical manufactures wide range of solvents, intermediates and polyols. In one of the cases, Acetone is used as a raw material which undergoes hydrogenation to produce Isopropyl alcohol (IPA). Different chemicals and derivatives are produced using IPA. In the process, hazardous waste is generated as mixed organics.

 - Inventory Checklist

We received inventory checklist from the facility and discussed the contents of the tanks.

- Tank 204- Propionic Acid tails (Requested analysis) hazardous waste (waste code: 0266219H).
 - Tank 205- Diol NRLO Product
 - Tank 207- RecVAM, bottom contains hazardous waste (waste code: 0024219H).
 - Tank 510- IPAc NRLO (Acid Leftovers) Need clarification on label
 - Tanks 404, 405, 406 and 408 are rundown tanks holding intermediate products which can be sent to Tank 204 if it is a waste.
 - Tank 152- contains 31,000 gallons of Ethanol with Glycerin(Product) Tank 317- Stripped wastewater discharged to POTW (Gulf Coast Authority)
 - Tank C-301 A wastewater is sent out (need to review the permits)
 - Tank 301 E requires further physical inspection.
- Reclaimed Material
 - Copper/Zinc and Nickel catalyst are used in the process of dehydrogenation of Tetralin to Decalin.
- We discussed the historical waste codes listed in the SWR which were not in use. The SWR contained two Slop tanks (Unit 13 and Unit 14) which needs further inspection.
- Daily Wrap up meeting
- Ongoing request for compliance records, including
 - A current Hazardous Waste Contingency Plan including records of distribution
 - Facility waste profiles for any solid waste generated since 2020. Include documentation relevant to the waste determination made for each waste (i.e. analytical reports or documentation to support generator knowledge; see 40 CFR 262.11(f))
 - Any currently effective contract or agreement between the facility and any waste management company or TSDF for disposition of waste generated by the facility.
 - Facility SOPs related to the generation or management of hazardous waste.
 - RCRA Unit inspection records since 2020 for tanks and container storage areas.
- Departed Facility at approximately 02:45pm

Planned activities for April 26, 2023

- Facility Walkthrough
 - Tank 301 E, Unit 13 and Unit 14.
- Personnel training (40 CFR 262.17)
- Contingency Plan (40 CFR 262 Subpart M)
- Tank 301 A Permit review.

Sandesh Thapa
Physical Scientist
Enforcement and Compliance Assurance Division

U.S. EPA Region 6 1201 Elm St, Suite 500

From: [Thapa, Sandesh](#)
To: [Dave, Narayan](#); [Penland, John](#)
Cc: [Yurk, Jeffrey](#)
Subject: Daily Summary of FY2023 RCRA CEI : Monument Chemical - Houston, TX (TXD096037932) - April 26, 2023
Date: Thursday, April 27, 2023 12:33:00 AM

Hi All,

Here is a summary from today's inspection. If there are any error or omissions, please let me know.

Inspection Attendees:

NAME	TITLE	REPRESENTING	PHONE	EMAIL
John Penland	Lead Hazardous Waste Inspector	US EPA Region 6	214-665-9717	Penland.john@epa.gov
Sandesh Thapa	Asst. Hazardous Waste Inspector	US EPA Region 6	214-665-2265	thapa.sandesh@epa.gov
Guillermo Urrutia	Health, Safety, Security and Emergency Services Specialist	Monument Chemical	832-863-8831	gurrutia@monumentchemical.com
Narayan Dave	Global Environmental Health and Safety Manager	Monument Chemical		ndave@monumnetchemical.com

Daily Summary

- Inspection Start: 09:25am
- Follow up from April 25, 2023, Daily Summary
 - The facility has sent registration update for Tank 204 on 4/25/2023.
- Facility Walkthrough
 - Wastewater Treatment

We were informed that the wastewater treatment system consists of following tanks:

- Tank 561 : Wastewater treatment unit (WWU) 1
- Tank 562: WWU 2
- Tank 563: WWU 3 Equalization Tank

We saw spill of unknown white solids near WWU1.

- Tanks containing processed wastewater
 - Awaiting status of tank 140,108,128,287, 544 and 164. According to the inventory sheets, these tanks contain processed wastewater. However, the facility was unable to provide a confirmation on the content- further review is required.
- Wastewater from tanks C301A, 316, 216 and 317 are discharged to POTW (yearly inspection conducted by Gulf Course Authority)
- Inspection of Tank Farm 1
 - Few gaps seen in the secondary containment area CFR 40 264.193(e)
Tanks 204 and 211 are missing labels for Hazardous Waste CFR 40 262.17
 - Need to inspect 90 days accumulation timeline.
- Reclaimed Material
 - Hazardous secondary waste is being reclaimed as cutter stock. Needs review.
- Slop Tank
 - No issues.
- Daily Wrap up meeting
- Ongoing request for compliance records, including
 - A current Hazardous Waste Contingency Plan including records of distribution
 - Facility waste profiles for any solid waste generated since 2020. Include documentation relevant to the waste determination made for each waste (i.e. analytical reports or documentation to support generator knowledge; see 40 CFR 262.11(f))
 - Any currently effective contract or agreement between the facility and any waste management company or TSDF for disposition of waste generated by the facility .
 - Facility SOPs related to the generation or management of hazardous waste.
 - RCRA Unit inspection records since 2020 for tanks and container storage areas.
- Departed Facility at 12:00pm

Planned activities for April 27, 2023

- Status update on tanks 140,108,128,287, 544 and 164.
- Inspect tanks 210 and 119

- Review reclaimed material process
- Review tanks 204 and 211- 90 days requirements.

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Office: 214-665-2265

From: [Thapa, Sandesh](#)
To: [Dave, Narayan](#); [Penland, John](#)
Cc: [Yurk, Jeffrey](#)
Subject: Daily Summary of FY2023 RCRA CEI : Monument Chemical - Houston, TX (TXD096037932) - April 27, 2023
Date: Friday, April 28, 2023 12:29:00 AM

Hi All,

Here is a summary from April 27, 2023 inspection. If there are any error or omissions, please let me know.

Inspection Attendees:

NAME	TITLE	REPRESENTING	PHONE	EMAIL
John Penland	Lead Hazardous Waste Inspector	US EPA Region 6	214-665-9717	Penland.john@epa.gov
Sandesh Thapa	Asst. Hazardous Waste Inspector	US EPA Region 6	214-665-2265	thapa.sandesh@epa.gov
Guillermo Urrutia	Health, Safety, Security and Emergency Services Specialist	Monument Chemical	832-863-8831	gurrutia@monumentchemical.com
Narayan Dave	Global Environmental Health and Safety Manager	Monument Chemical		ndave@monumnetchemical.com

Daily Summary

- Inspection Start: 09:30am
- Follow up from April 26, 2023, Daily Summary
 - Corrections:
 - The tanks containing process wastewater are 140, 206, 210, 216, 303, 504 and WW1. Therefore, the update request made on April 26, 2023, needs to be

corrected and specific to these tanks.

- Tanks containing processed wastewater
 - Tank 140- Contains wastewater which flows to tank 210.
 - Tank 206 – Empty
 - Tank 210- Contains Hazardous waste
 - Tank 216- Contains process water which feeds to Stripper column
 - Tank 303- Contains process water which is non-hazardous
 - Tank 504- Dedicated wastewater treatment (NPDES)
- Facility Walkthrough
 - Tank 210 and tank 119 contained Hazardous waste. No issues were found with the tanks. These tanks have dedicated pumps that use filters. Further review is necessary on the management of used filters.
- Tank Bottoms used as product
 - The facility sends out tank bottoms of mixed organics as a product to be used as cutter stock. Need review to identify these bottoms as co-product or byproduct. Information request pending with facility for identification.
- Contingency Plan and Training Documents
 - Received RCRA training documents and contingency plan.
- Daily Wrap up meeting
- Ongoing request for compliance records, including
 - Any currently effective contract or agreement between the facility and any waste management company or TSDF for disposition of waste generated by the facility.
 - Facility SOPs related to the generation or management of hazardous waste.
 - RCRA Unit inspection records since 2020 for tanks and container storage areas.
 - Analysis report related to tank bottoms used as product.
- Departed Facility at 02:40pm

Planned activities for April 28, 2023.

- Q&A session
- Review document submission and establish timeline.
- Inspection closing conference

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From: [Thapa, Sandesh](#)

To: [Dave, Narayan; Penland, John](#)
Cc: [Yurk, Jeffrey](#)
Subject: Daily Summary of FY2023 RCRA CEI : Monument Chemical - Houston, TX (TXD096037932) - April 28, 2023
Date: Thursday, May 4, 2023, 3:28:00 PM

Hi All,

Here is a summary from the inspection closing conference. If there are any error or omissions, please let me know.

Inspection Attendees:

NAME	TITLE	REPRESENTING	PHONE	EMAIL
John Penland	Lead Hazardous Waste Inspector	US EPA Region 6	214-665-9717	Penland.john@epa.gov
Sandesh Thapa	Asst. Hazardous Waste Inspector	US EPA Region 6	214-665-2265	thapa.sandesh@epa.gov
Narayan Dave	Global Environmental Health and Safety Manager	Monument Chemical	281-507-3223	ndave@monumnetchemical.com

Daily Summary

- Inspection Start: 09:30am
- Follow up from April 27, 2023, Daily Summary
 - Tank 140
 - Discussed analysis report- pH 5, 98.4 percent of moisture.
- Identified Concerns
 - Missing labels.
 - Tanks 204 and 211 contained hazardous waste without labels.
40 CFR 262.17 5(ii)(A)
 - We found an unlabeled container used for satellite collection inside the laboratory which was corrected on spot.
 - Operational tank 204 contained hazardous waste and no active in SWR.
 - Facility sent an HW1 update request on 4/25/2023
 - Few gaps observed in the secondary containment area CFR 40 265.193(e)
 - Waste determination being conducted away from point of generation. We found few 5 gallons of buckets staged near CAA for waste determination.
 - During our inspection, we found a Hazardous waste drum with an unsecured lid located at SAA.

- Areas of Additional Review
 - Management of used filter from Hazardous waste tank pumps.
 - Identification of tank bottoms of mixed organics used as cuter stock: co-product or byproduct.
 - RCRA Unit inspection records since 2020 for tanks and container storage areas- review of 90 days requirement 40 CFR 262.17 5(ii)(C).
 - Facility waste profiles for any solid waste generated since 2020. Include documentation relevant to the waste determination made for each waste (i.e. analytical reports or documentation to support generator knowledge; see 40 CFR 262.11(f)
 - Tank diagrams and engineers reports of hazardous waste tanks.
 - Training documents review.
- Ongoing request for compliance records, including
 - Any currently effective contract or agreement between the facility and any waste management company or TSDf for disposition of waste generated by the facility
 - Facility SOPs related to the generation and management of hazardous waste.
RCRA Unit inspection records since 2020 for tanks and container storage areas.
 - Analysis report related to tank bottoms used as product.
 - Waste analysis report of tanks with processed water.
- Departed Facility at 12:00pm

Sandesh Thapa
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