

REPORT OF RCRA COMPLIANCE EVALUATION INSPECTION

At

**HollyFrontier El Dorado Refining LLC
1401 South Douglas Road
El Dorado, Kansas 67042**

EPA ID Number: KSD007233422

On

May 10 – 17, 2022

By

**U.S. ENVIRONMENTAL PROTECTION AGENCY
Region 7
Enforcement and Compliance Assurance Division (ECAD)**

1.0 INTRODUCTION

I performed a Resource Conservation and Recovery Act (RCRA) compliance evaluation inspection (CEI) at HollyFrontier El Dorado Refining LLC (HollyFrontier), located at 1401 South Douglas, El Dorado, Kansas, on May 10 – 17, 2022. I conducted the RCRA inspection under the authority of RCRA Section 3007(a), as amended. During the inspection, I collected the information and data necessary to make preliminary findings regarding compliance with the applicable RCRA regulatory and statutory requirements. This report and attachments present the results of the inspection.

I inspected the facility as a Large Quantity Generator (LQG), Used Oil Generator, and a Small Quantity Universal Waste Handler (SQUWH).

2.0 PARTICIPANTS

HollyFrontier

Christine Sawyer, Environmental Specialist

Steven Dalluge, Environmental Specialist

Karim Assaf, PE, PMP, Environmental Manager (entrance and exit conferences)

Environmental Protection Agency Region 7

Kenneth Herstowski, Environmental Engineer, ECAD/Chemical Branch/RCRA Section

3.0 Previous RCRA CEI

HollyFrontier was last inspected for compliance with RCRA on August 22 – 24, 2017, by the Kansas Department of Health and Environment (KDHE). The report identified the following potential findings or violations in the following areas:

Hazardous waste determination of chemical products
Documentation of remedial actions on inspection logs

4.0 INSPECTION PROCEDURES

I followed the inspection procedures discussed in the RCRA CEI Standard Operating Procedure (No. 2321.1D), unless noted differently. The inspection was unannounced. I completed checklists and other inspection related documents and collected photocopies. I collected 28 photographs with a digital camera and prepared a photographic log (attachments 1 and 2). I monitored for volatile organic emissions with a Thermo Fisher Scientific TVA2020 organic vapor analyzer utilizing a flame ionization detector (hereafter referred to as the “EPA FID”). I obtained copies of records from the facility as detailed in the sections that follow. I obtained nine aerial photographs of the facility using Google Earth Pro (attachment 3). I obtained a facility map of HollyFrontier during the inspection (attachment 4). I prepared a Notice of Preliminary Findings (NOPF) as a result of my inspection (attachment 5). Documents and records were collected during the inspection and a Receipt for Documents and Samples was prepared (attachment 6). A Confidentiality Notice in which a claim of confidential business information was not asserted by HollyFrontier (attachment 7).

During the inspection, discussions consisted of the facility operations, wastes generated, and waste management practices. I conducted a visual inspection of hazardous waste management areas. I monitored containers during the inspection following 40 Code of Federal Regulations (CFR) Part 60, Appendix A, Method 21 procedures (hereafter referred to as “Method 21”) using the EPA FID.

May 10, 2022

At about 08:44 on May 10, 2022, I arrived unannounced at HollyFrontier. A drive-by visual observation was completed from South Haverhill Road (west side of the facility) and Sunset Road (north side of the facility). No issues were identified from the drive-by visual inspection. The facility was operational with onsite vehicle traffic and personnel movement. I entered the building at the security gate, described the purpose of my visit was to conduct a CEI and identified Mr. Oscar DonJuan as my site contact. The security guard contacted Mr. DonJuan and I was directed to meet him in the lobby of the nearby administrative office building. I relocated to the administrative office building lobby where I was met shortly thereafter by Mr. DonJuan. I introduced myself and stated that the purpose of my visit was to conduct a hazardous waste compliance evaluation inspection, after which Mr. DonJuan led me to a conference room for an entrance conference. I was met in the conference room by Ms. Sawyer and Mr. Dalluge at which time Mr. DonJuan departed. Mr. Assaf joined us in the conference room shortly thereafter.

I presented my EPA credentials to Ms. Sawyer and Messrs. Assaf and Dalluge. I provided a copy of RCRA Section 3007 and reviewed the EPA’s inspection authority. Mr. Assaf provided verbal consent to proceed with the inspection. I described the importance of collecting accurate information and provided a copy of Title 18 United States Code, Sections 1001 and 1002, which provides for penalties if false and/or misleading information is provided to Federal representatives, and for the possession and use of fraudulent documents. I

discussed HollyFrontier's confidentiality rights and described a Confidentiality Notice to be provided at the end of the inspection to make a confidential business information (CBI) claim. I provided a copy of EPA Region 7's "Notice Regarding Proprietary/Confidential Business Information Submitted to or Collected by EPA in Connection with Inspections." Ms. Sawyer and Mr. Dalluge acted as the primary facility representatives during the inspection activities.

I explained the purpose, scope, and procedures for the RCRA CEI. I provided my prepared records request (attachment 8). I reviewed the planned monitoring with the EPA FID and EPA Gas Imaging Camera. After the entrance discussions, I conducted a visual inspection of the Waste Pad, PK Painting Enclave, Gofiner Unit, Stormwater Flume, Small Stormwater Flume, Vacuum Truck Unloading Facility, Lab Storage Building, New Bundle Cleaning Pad and New Bundle Cleaning Pad. I conducted monitoring of hazardous waste containers using the EPA FID. Ms. Sawyer and/or Mr. Dalluge accompanied me during the visual inspection as noted in the discussions below. Following the visual inspection of the facility, I returned to the conference room to review with Ms. Sawyer and Messrs. Assaf and Dalluge observations made during the visual inspection and to discuss my records request. Following these discussions, I departed HollyFrontier.

May 11, 2022

At about 07:55, I arrived at HollyFrontier and was met by Mr. Dalluge in the lobby of the administrative building. We adjourned to a conference room where we were joined by Ms. Sawyer after which I conducted visual inspection of the Lab Storage Building and the used oil tank at the north end of the maintenance building (attachment 3). I was accompanied by Ms. Sawyer and/or Mr. Dalluge during the visual inspection. Following the visual inspection, we returned to the conference room for a summary exit conference. Mr. Assaf joined us in the conference room for the exit conference. I reviewed the purpose and scope of the RCRA CEI. I reviewed the records request for which HollyFrontier agreed to provide electronic records uploaded to the EPA SharePoint folder that I set up for the CEI. I established a target date of record production of the close of business on Tuesday, May 16, 2022¹. I reviewed the notice "Regarding Proprietary/Confidential Business Information Submitted to or Collected by EPA in Connection with Inspections" which Mr. Assaf declined to sign during the exit conference as his review of the inspection photographs and requested records was not completed. I established 15:00 on Tuesday, May 16, 2022, as the time for a remote conference to review any CBI claims that may be made by HollyFrontier. I provided a Receipt for Documents and Samples which Mr. Assaf declined to sign until the requested records had been provided. I reviewed my findings from the NOPF which Mr. Assaf signed. I provided Mr. Assaf a copy of the NOPF (yellow copy of the completed carbonless transfer sets). I departed the facility following the exit conference.

May 17, 2022

Beginning at 15:00 on Tuesday, May 17, 2022, I initiated a remote conference with Messrs. Assaf and Dalluge. We discussed the Contingency Plan, reviewed the findings from the site visit, record production and CBI. Mr. Assaf stated that a CBI claim was not being made as of his review prior to the remote conference. I discussed with Mr. Assaf how HollyFrontier can make a CBI claim at the time the documents are uploaded to the designated EPA SharePoint folder or subsequent to the document production by contacting me.

¹ Mr. Assaf called by telephone on Monday, May 15, 2022, to extend the record production due date to the close of business on Thursday, May 19, 2022, to which I agreed. The requested records were uploaded to the designated EPA SharePoint folder at the close of business on Wednesday, May 17, 2022.

5.0 FINDINGS AND OBSERVATIONS

5.1 General Information/Facility Description

HollyFrontier is located adjacent to the southwestern corner of the City of El Dorado, in Butler County, Kansas. HollyFrontier occupies 1,018.7 acres, and occupies all or portions of Sections 9, 10, 11, 14, and 15 in Township 26 South, Range 5 East (United States Geological Survey [USGS], 2010). The latitude and longitude for the geographic center of the Facility (near the Crude Vacuum Unit) is approximately 37° 47' 45" N/96° 52' 24" W. The Facility is generally bound by Salt Creek to the west, Sunset Road to the north, and Constant Creek or the Walnut River to the east. The southern extent of HollyFrontier is immediately south of the oxidation ponds and the constructed wetlands. Railroad and road easements are present at the Facility. The railroad right-of-way runs southwest to northeast, bisecting the active refinery. Approximately 40 percent of the facility is composed of paved roads, infrastructure, or other improved surfaces.

Frontier Oil purchased the El Dorado, Kansas, refinery from the Shell-Texaco joint venture, Equilon, in 1999. A merger between Holly Corporation and Frontier Oil completed in 2011 formed HollyFrontier Corporation (NYSE: HFC). In August 2021, HollyFrontier agreed to purchase the assets of Sinclair Oil Corporation, including two refineries near Casper, Wyoming, and Sinclair, Wyoming. The succeeding company, HF Sinclair Corporation, completed the transactions March 14, 2022. HF Sinclair Corporation (NYSE: DINO) is the new parent entity of HollyFrontier. HF Sinclair now owns and operates refineries located in Kansas, Oklahoma, New Mexico, Utah, Washington and Wyoming and markets its refined products principally in the Southwest U.S. and Rocky Mountains, extending into the Pacific Northwest and in other neighboring Plains states.

Petroleum refining operations at the Facility began in 1917 and have evolved to the current refinery operations producing a range of products including motor fuels, home heating oils, asphalt blending material, petroleum coke, commercial-grade sulfur, and liquid petroleum gases. The refinery's current crude oil processing capacity is 135,000 barrels (bbls) per day. Major process units associated with the Facility refining processes include the following as presented in the "El Dorado Refinery Process Overview Handbook." See site figure for locations of process units (attachment 4)

- Crude/Vacuum Unit
- Belco Scrubber System
- Gofiner Unit
- Delayed Coking Unit (DCU)
- Hydro Treating Unit (HTU) 4/Hydrogen Generation Unit 1
- Flare Gas Recovery Unit
- Fluid Catalytic Cracking Unit (FCCU)/Vapor Recovery Unit (VRU)
- Hydrofluoric Acid Alkylation (Alky)
- Hydrotreater Unit 3/Isomerization Unit
- Cogeneration/Air Separation Unit
- Sulfur Block [Sulfur Recovery (SRU)/Amine/Sour Water Stripper (SWS)/Tail Gas Treater]
- Low Pressure Gas Treater 1 and 2/Gas Liquids Unit (GLU)
- Splitter/Aromatic Recovery Unit/Cumene
- Reformer [Hydrotreater/Catalytic Reforming/Gas Concentration/Pressure Swing Absorber]
- Hydrotreater Unit
- Hydrogeneration Unit
- Naphtha Fractionator Unit
- Water Treatment (WWTP)/Air Plant

- Wastewater Treatment Plant
- Tank Farm
- Boilers

Approximately 297 above ground storage tanks (ASTs) are present at the facility with capacities ranging from approximately 12,000 to 200,000 bbls. Tank identification numbers, capacities, and contents are presented in Table 3.2 of the 2015 Stormwater Pollution Prevention Plan. Engineered stormwater controls present at the Facility include the following structures: earthen berms, retaining walls, collection ditches, sumps, stormwater sewers, and retention basins. Stormwater runoff is diverted to retention basin(s) or the WWTP. Tank dike drainages flow into the WWTP via a network of stormwater sewers. The Facility stormwater sewer network is composed of the north, middle, and south stormwater sewers. All stormwater runoff entering the three stormwater sewers is routed first to the open American Petroleum Institute (API) Separator at the WWTP.

- North Stormwater Sewer – Receives flow from tank dikes in the northeast area of the Tank Farm and the North Pond.
- Middle Stormwater Sewer – Receives runoff from paved and concrete pads throughout the process unit areas.
- South Stormwater Sewer – Routed adjacent to the FCCU, Coker, Gofiner, HTU 4, and Alky units.

The oily wastewater gathering system consists of three oily water sewers (North, Middle, and South) that transport process wastewater and other oily liquids directly to the closed API Separator at the WWTP for treatment. In addition, there is a separate benzene sewer serving process units generating wastewater containing greater than 10 parts per million (ppm) benzene. The benzene sewer leads to the Benzene Recovery Unit (BRU) for pre-treatment. Effluent from the BRU is then discharged to the closed API Separator. The three oily water sewers and the benzene sewer are closed systems.

- North Oily Water Sewer – Receives process wastewater from the No. 1 and No. 2 Sulfur Recovery Units, Aromatic Recovery Unit (ARU), and sanitary sewer input from offices, laboratories, and warehouses in the northeast area.
- Middle Oily Water Sewer – Receives process wastewater from the FCCU/VRU, Gofiner, and Reformer complex.
- South Oily Water Sewer – Receives process wastewater from the Alky unit, DCU, HTU 4, Hydrotreater Unit 5, and Gasification.
- Benzene-Containing Sewers – The enclosed benzene-containing waste sewers lead to the BRU. Benzene-containing wastewater is subjected to multi-stage treatments in the BRU in order to lower benzene concentrations in the treated effluent to below 10 milligrams per liter (mg/L). The treated effluent is then discharged from the BRU to the API Separator where it is comingled with other wastewater streams entering the WWTP.

HollyFrontier operates a National Pollutant Discharge Elimination System (NPDES)-permitted WWTP to treat wastewater prior to discharge to the Walnut River. The WWTP is composed of the API Separator, Dissolved Air Flotation (DAF) Unit, the CMAS basin, clarifiers, oxidation ponds, and constructed wetlands. The WWTP receives oily sewer wastewater, sanitary wastewater, stormwater from process units, rainwater collected in tank dikes, treated benzene wastewater, and spent caustics.

5.2 RCRA Status

The Notification Acknowledgement/Verification Report (attachment 9) indicates that HollyFrontier is a large quantity generator. Ms. Sawyer stated HollyFrontier also generates used oil and universal waste. I reviewed the site verification report with Ms. Sawyer who did not identify any updates. I determined at the time of my

inspection that HollyFrontier was generating greater than 1,000 kilograms of hazardous waste per month based upon e-manifest data for 2021. Based on this information, I reviewed HollyFrontier for compliance with large quantity generator, used oil and universal waste requirements during my inspection.

5.3 Waste Streams and Management

I reviewed HollyFrontier hazardous waste generation with Ms. Sawyer. The following major hazardous waste streams have been shipped offsite to treatment, storage, and disposal facilities.

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2022 (eManifest) AS OF 4-28-22	Pounds	Waste Codes	Process	Management	Destination
Petroleum Refinery Primary Oil/Water/Solids Separation Sludge (manifest waste line description: NA3077, HAZARDOUS WASTE, SOLID, N.O.S. (F037), 9, PG III)	299,149 (Clean Harbors) 85,685 (Systech)	F037	Generated from removal of solids from Stormwater Flume with vacuum truck directly or indirectly into vacuum roll-off box. Also includes solids removed from Vacuum Truck Unloading Facility sump (mixture rule)	Directly loaded into vacuum roll- off box with filled roll-off transferred to Waste Pad. Removed directly into vacuum truck, solids/liquids unloaded from vacuum truck into sump at Vacuum Truck Unloading Facility at wastewater treatment plant, transferred into roll-off boxes with end loader with filled roll-off transferred to Waste Pad.	Clean Harbors Lone Mountain, Inc. Waynoka, OK OKD065438376 H132-Landfill Systech Environmental Corporation Fredonina, KS KSD980633259 H061- Fuel Blending
Heat Exchanger Bundle Cleaning Sludge and Petroleum Refinery Primary Oil/Water/Solids Separation Sludge (manifest waste line description: NA3077, Hazardous waste, solid, n.o.s., (K050, F037), 9, III, RQ)	43,553	F037 K050	K050 generated from removal of solids with vacuum truck from bundle cleaning at Old and New Bundle Cleaning Pads with vacuum truck. F037 due to mixture rule when managing solids/liquids unloaded from vacuum truck into sump at Vacuum Truck Unloading Facility Note K050 is generated without F037 waste code when loaded indirectly into a vacuum roll-off at the bundle cleaning pads.	Removed directly into vacuum truck, solids/liquids unloaded from vacuum truck into sump at Vacuum Truck Unloading Facility at wastewater treatment plant, transferred into roll-off boxes with end loader with filled roll-off transferred to Waste Pad. Vacuum roll-offs are transferred to Waste Pad when filled.	Systech Environmental Corporation Fredonina, KS KSD980633259 H061- Fuel Blending

Waste Paint/Solvents (manifest waste line description: RQ, UN1263, WASTE PAINT RELATED MATERIAL, 3, PG II (D001))	450	D001 F003 F005	Waste paint and solvents from painting generated at PK Painting Enclave.	Waste paint and solvents are accumulated in a 55-gallon drum at the PK Painting Enclave. Filled drums are transferred to the waste pad.	Clean Harbors Environmental Services, Inc. Kimball, NE NED981723513 H040-Incineration
Spent Hydrotreating Catalyst (manifest waste line description: RQ, UN3190, WASTE SELF- HEATING SOLID, INORGANIC, N.O.S. (HYDROTREATINGCATALYST, K171), 4.2, PG II (K171))	84,572	K171	Spent Hydrotreating Catalyst is removed from process vessels pneumatically and transferred directly into containers.	Filled containers are accumulated near the process unit as they are filled.	Clean Harbors San Leon, Inc. San Leon, TX TXD981053770 H039-Other recovery or reclamation
Waste Paint (manifest waste line description: UN1263, WASTE PAINT, 3, PG II)	1,400	D001 D005 D006 D007 D008 D011 D035	Waste paint is generated at the PK Painting Enclave.	Waste paint is accumulated in a 55-gallon drum at the PK Painting Enclave. Filled drums are transferred to the waste pad.	Clean Harbors Environmental Services, Inc. Kimball, NE NED981723513 H040-Incineration

I reviewed the 2019 RCRA Biennial Report for HollyFrontier from the EPA RCRAInfo v6 database. The biennial report is consistent with the waste generation and e-manifest information. The 2021 RCRA Biennial Report for HollyFrontier was not available for review at the time of the inspection.

5.4 Hazardous Waste Accumulation

HollyFrontier accumulates hazardous waste in several areas. I visually inspected hazardous waste accumulation areas on May 10 – 11, 2022. I was accompanied during my visual inspection by Ms. Sawyer and/or Mr. Dalluge as noted.

See Section 5.7 for the discussion of air emission requirements for containers.

5.4.1 Waste Pad

HollyFrontier accumulates hazardous waste at an area referred to as the Waste Pad located in the northeast portion of the facility (page 2, attachment 3). The area is unpaved with a gravel layer for vehicle and container movement. Both roll-off containers and drum containers are accumulated in this area. I visually inspected the containers in this area on May 10, 2022, accompanied by Ms. Sawyer and Mr. Dalluge. I observed roll-off containers, vacuum roll-off containers, and drums present. Containers of non-hazardous waste and hazardous waste are both accumulated at the Waste Pad.

A roll-off container is an open top dumpster characterized by a rectangular footprint, utilizing wheels to facilitate loading, unloading, and rolling the container in place. The container is designed to be transported by special roll-off trucks which are designed for the container loading, unloading, and positioning. Roll-off containers have a swinging door on the end for easier emptying of waste from the container. A vacuum roll-off is similarly characterized by a rectangular footprint and wheels to facilitate rolling the container in place. Vacuum roll-offs enclosed containers that have seals to prevent leaks and to hold liquids, dry materials, mixtures of wet and dry materials, and sludge. Vacuum roll-offs are a water-tight container equipped to withstand the pneumatic suction of a vacuum truck. Vacuum roll-offs are used at work sites in combination with a vacuum truck to enable solid or liquid waste to be collected and transported with a roll-off trailer.

Notice of Preliminary Finding (NOPF) 1 - 40 Code of Federal Regulations 262.34(a): Storage > 90 days – 18TK Caustic VRB27186 @ Waste Pad. K.A.R. 28-31-262(a)

The State of Kansas has adopted by reference the EPA's requirements for generators of hazardous waste found at 40 Code of Federal Regulations (CFR) Part 262². The requirements for large quantity hazardous waste generators accumulating hazardous waste for less than 90 days are found at 40 CFR 262.34(a). In pertinent part, the requirement at 40 CFR 262.34(a) allows “... *a generator may accumulate hazardous waste on-site for 90 days or less without a permit or without having interim status* ...”

I observed one 25 cubic yard vacuum roll-off at the Waste Pad containing “18TK Caustic” with container number VRB27186 that had an accumulation start date of February 1, 2022, indicating the container had been onsite for 99 days as of May 10, 2022 (photograph 23, attachment 1). Ms. Sawyer described the delay as due to unavailability of the hazardous waste transporter. Ms. Sawyer described the container contents as waste from

² See K.A.R. 28-31-262. Generators of hazardous waste; adoption and modification of federal regulations. In pertinent part, Kansas has adopted the provisions of 40 CFR part 262, including the appendix, as in effect on July 1, 2006.

the decommissioning of a tank and that HollyFrontier had determined the waste to be a hazardous waste due to Toxicity Characteristic Leaching Procedure (TCLP) benzene concentrations (EPA waste code D018). I noted the weight of the hazardous waste in the container from the container label as 10,800 pounds.

See Section 5.7.1 for a discussion of air emissions finding for 18TK Caustic, container number VRB27186.

The Lab Supply Building which is located at the Waste Pad area has containment booms also referred to as adsorbent containment socks available, a portable fire extinguisher was located at the Waste Pad area outside the entrance to the Lab Supply Building, a fire hydrant was located nearby for use by the HollyFrontier Fire Department. Employees handling hazardous waste also are provided with two-way radios that can be used to summon assistance. Ms. Sawyer described the HollyFrontier Fire Department responds to spills or releases and is equipped with the equipment necessary for initial response to such incidents.

5.4.2 Lab Supply Building

The Lab Supply Building is also known as and has been referenced in previous inspection reports as the “Old Skel Gas” building. The Lab Supply Building is located in the northeastern portion of the facility within the area of the Waste Pad (page 2, attachment 3). The Lab Supply Building stores used laboratory equipment, hazardous waste aerosol cans and universal waste lamps.

NOPF 2 – 40 CFR 262.34(a)(3): Containers not clearly marked “Hazardous Waste,” two at Lab Storage Building and two at WWTP - VTUF WWT Contaminated Soil, container number 1085736, VTUF Pad Contaminated Soil, container number RB33481RT. K.A.R. 28-31-262(a)

The State of Kansas has adopted by reference the EPA’s requirements for generators of hazardous waste found at 40 CFR Part 262. The requirements for large quantity hazardous waste generators accumulating hazardous waste for less than 90 days found at 40 CFR 262.34(a). The requirement at 40 CFR 262.34(a)(3) states in pertinent part *“While being accumulated on-site, each container and tank is labeled or marked clearly with the words, “Hazardous Waste...”*

I visually inspected the containers in this area on May 10, 2022, accompanied by Mr. Dalluge. Outside of the overhead door of the Lab Storage Building, I observed pierced and empty aerosol cans (photograph 1, attachment 1). Inside the Lab Storage Building, I observed three 55-gallon containers labeled “Aerosol Cans” (EPA waste codes D001, D035, D039, D040). Two of the containers closed with round dome drum lids with a spring-loaded hinged door. Both were approximately half full of unpierced aerosol cans. The third container was closed with aerosol can piercing and draining equipment (photograph 12, attachment 1) with an undetermined amount of liquid in the container. I returned to the Lab Storage Building on May 11, 2022, accompanied by Ms. Sawyer and Mr. Dalluge. The photographs I attempted to capture of the three aerosol can containers did not save to the camera memory card. I re-photographed the containers on May 11, 2022. Ms. Sawyer placed “Hazardous Waste” labels with an accumulation start date of April 2, 2022, on the two unlabeled hazardous waste containers (two left most containers photograph 12, attachment 1). Ms. Sawyer described the pierced and empty aerosol cans as “scrap metal.”

The Lab Supply Building has containment booms also referred to as adsorbent containment socks available, a portable fire extinguisher was located outside the entrance to the Lab Supply Building, a fire hydrant was located nearby for use by the HollyFrontier Fire Department. Employees handling hazardous waste also are provided with two-way radios that can be used to summon assistance. Ms. Sawyer described the HollyFrontier Fire Department responds to spills or releases and is equipped with the equipment necessary for initial response to such incidents.

See Section 5.13 for the discussion of Universal Waste Lamps in the Lab Storage Building.

5.4.3 Gofiner Unit

I asked Ms. Sawyer how Spent Hydrotreating Catalyst, EPA waste code K171, is generated and managed on site. Ms. Sawyer explained the spent catalyst is generated when catalyst is replaced in various process locations at HollyFrontier and such a process had started at the Gofiner Unit (page 6, attachment 3). The Gofiner is a process and technology that has been designed by ExxonMobil for desulphurizing crude oil and converting heavy fractions into light fractions. The Gofiner Unit breaks up heavy hydrocarbon molecules into lighter fractions using heat and catalysts. The various fractions can then be used for different things from a light gas to heavy solids, such as bitumen.

I visually inspected the area around vessel D1002 in the Gofiner Unit on May 10, 2022, accompanied by Ms. Sawyer and Mr. Dalluge. A contractor, SWAT Catalyst Service, was onsite preparing for the vessel entry and catalyst replacement. The SWAT Catalyst Service foreman explained that specialty pneumatic [vacuum] equipment is used to remove the catalyst and transfer the spent catalyst into the spent catalyst bins. The bins are constructed of heavy gauge steel, airtight, and inerted with dry ice due to the self-heating nature of the spent catalyst. I observed the catalyst bins that would receive the spent catalyst. The bins appeared to be in good condition with container closures with locking rings in place. I asked where the containers would be accumulated when filled. Ms. Sawyer pointed out an open area to the west of the Gofiner Unit that would be used to accumulate the containers prior to shipment off site.

Portable fire extinguishers were observed at the Gofiner Unit along with fire hydrants located nearby for use by the HollyFrontier Fire Department. Employees handling hazardous waste also are provided with two-way radios that can be used to summon assistance. Ms. Sawyer described the HollyFrontier Fire Department responds to spills or releases and is equipped with the equipment necessary for initial response to such incidents.

I observed no apparent issues or findings related to the pending generation of Spent Hydrotreating Catalyst.

5.4.4 Bundle Cleaning Pads

HollyFrontier operates two areas, the Old Bundle Cleaning Pad, and the New Bundle Cleaning Pad to clean sludge from shell and tube heat exchanger units located in the southern area of the facility (page 3, attachment 3). A heat exchanger bundle consist of a "bundle" of tubes which are bound together and inserted into a "shell" which makes up the outer part of the unit normally used to cool process streams in the refinery. The tube bundles are removed from the shell and transported to either of the bundle cleaning pads. The tubes are cleaned of built-up residues or sludges using a high-pressure water spray lance. The removed bundle cleaning sludge collects in a grated trench (foreground right of photograph 2, attachment 1) at the bundle cleaning pad and the water drains to liquid/solid separator sump (photograph 3, attachment 1) out of which the liquids flow into a sewer leading to the WWTP. The Heat Exchanger Bundle Cleaning Sludge is removed from the grated trench and sump with a Vacuum Truck alone or in combination with a vacuum roll-off.

I visually inspected both the Old Bundle Cleaning Pad, and the New Bundle Cleaning Pad on May 10, 2022, accompanied by Mr. Dalluge. I did not observe either less than 90-day or Satellite Accumulation³ containers at

³ Satellite accumulation is a term of art for the situation where the generator accumulates hazardous waste in containers at or near any point of hazardous waste generation. The pertinent requirements are found at 40 CFR 262.34(c)(1), et seq. (K.A.R. 28-31-262).

either bundle cleaning pad. I observed roll-off container (photographs 2 and 3, attachment 1) that contained pleated fabric filters. I asked Mr. Dalluge what process generated the filters and whether the filters were hazardous waste. Mr. Dalluge did not know that information at that time. Mr. Assaf in response to my inquiry regarding the source and waste determination of the filters stated the filters were non-hazardous and was provided analytical test results for “Coke WWTP Sludge Bundle Pad Filters” (attachment 10).

Portable fire extinguishers were observed at the bundle cleaning pads along with fire hydrants located nearby for use by the HollyFrontier Fire Department. Employees handling hazardous waste also are provided with two-way radios that can be used to summon assistance. Ms. Sawyer described the HollyFrontier Fire Department responds to spills or releases and is equipped with the equipment necessary for initial response to such incidents.

5.4.5 Wastewater Treatment Plant (WWTP)

HollyFrontier accumulates hazardous waste (EPA waste code F037) in roll-off containers at the WWTP which is located in the east portion of the facility (page 2, attachment 3). The Vacuum Truck Unloading Facility (VTUF) is also located at the WWTP. Vacuum trucks used to remove liquids, sludges and hydro excavated soil are brought to the VTUF and unloaded. A vacuum truck operates a pump on the truck to remove air from the holding tank creating a vacuum. Valves are then used to create suction on the hose, allowing it to suck up liquids, powders, and sludges. Vacuum trucks containing only liquids can be unloaded into the WWTP at the VTUF directly via piping. Vacuum truck containing a mixture of liquids, solids, and/or sludges are unloaded into a wastewater sump at the VTUF. The sump is constructed of concrete and is sloped downward from the ground surface to contain the materials deposited therein (photograph 4, attachment 1). The materials are allowed to dewater with the liquid flowing into liquid/solid separator sump out of which the liquids flow into a sewer leading to the WWTP. The dewatered materials remaining in the sump are loaded into roll-off containers with a front-end loader.

NOPF 2 – 40 CFR 262.34(a)(3): Containers not clearly marked “Hazardous Waste,” two at Lab Storage Building and two at WWTP - VTUF WWT Contaminated Soil, container number 1085736, VTUF Pad Contaminated Soil, container number RB33481RT. K.A.R. 28-31-262(a)

The State of Kansas has adopted by reference the EPA’s requirements for generators of hazardous waste found at 40 CFR Part 262. The requirements for large quantity hazardous waste generators accumulating hazardous waste for less than 90 days found at 40 CFR 262.34(a). The requirement at 40 CFR 262.34(a)(3) states in pertinent part *“While being accumulated on-site, each container and tank is labeled or marked clearly with the words, “Hazardous Waste...”*

I visually inspected the WWTP on May 10, 2022, accompanied by Mr. Dalluge. I observed roll-off container labeled “VTUF Pad Contaminated Soil,” container number RB33481RT, and a roll-off container labeled “VTUF WWT Contaminated Soil,” container number 1085736 (photographs 5 and 6, attachment 1). I asked Mr. Dalluge if these two containers were accumulating hazardous waste and he confirmed that they were both hazardous waste accumulation containers. The containers held sludge from the VTUF sump which is Petroleum Refinery Primary Oil/Water/Solids Separation Sludge (EPA waste code F037). I was unable to determine the volume of hazardous waste in the two containers during the visual inspection. Mr. Dalluge wrote the words “Hazardous Waste” on the container labels subsequent to my photographs. The containers were closed, included an accumulation start date and were otherwise in good condition.

Portable fire extinguishers are located at the WWTP area, a fire hydrant is located nearby for use by the HollyFrontier Fire Department. Employees handling hazardous waste are provided with two-way radios that can

be used to summon assistance. Ms. Sawyer described the HollyFrontier Fire Department responds to spills or releases and is equipped with the equipment necessary for initial response to such incidents.

5.5 Satellite Accumulation

HollyFrontier utilizes Satellite Accumulation of hazardous waste in several areas (attachment 11).

I visually inspected Satellite Accumulation at the PK Painting Enclave and the WWTP.

5.5.1 PK Painting Enclave

PK Painting is an onsite contractor that performs painting services for HollyFrontier. PK Painting operates onsite from an enclave located in the northern portion of the facility (page 2, attachment 3). I visually inspected the PK Painting Enclave on May 10, 2022, accompanied by Ms. Sawyer and Mr. Dalluge.

NOPF 3 – K.A.R. 28-31-262(c)(7): Satellite Accumulation Container not marked “Hazardous Waste,” one at PK Painting Enclosure.

The State of Kansas requirements for large quantity generators of hazardous waste are found at K.A.R. 28-31-262. The requirements include the EPA’s requirements for generators of hazardous waste found at 40 CFR Part 262 which have been adopted by reference and Kansas specific requirements. The Kansas requirement for found at K.A.R. 28-31-262(c)(7) states, in pertinent part, for Satellite Accumulation container labeling “... *Marks the containers with the words ‘Hazardous Waste.’*” is more stringent than the EPA requirement at 40 CFR 262.42(c)(1)(ii).

I observed one 55-gallon steel drum accumulating Waste Paint/Solvents (EPA waste codes D001, F003, F005). The container was less than 10 percent filled. The container was not labeled with the words “Hazardous Waste.” The image of the missing container labeling failed to save to my digital camera memory card.

NOPF 4 - 40 CFR 265.173(a): Satellite Accumulation containers not closed, one at Pk Painting, two at WWTP. K.A.R. 28-31-262(a) → 40 CFR 262.34(c)(1)(i)

The requirement at 40 CFR 262.34(c)(1)(i) references the container requirements of 40 CFR Part 265, Subpart I. The requirement at 40 CFR 265.173(a) found in 40 CFR Part 265, Subpart I, Use and Management of Containers, requires in pertinent part “*A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste.*”

The same container that I observed above was equipped with a drum funnel to facilitate the transfer of smaller containers into the 55-gallon steel tight head drum. The drum funnel was attached to the two-inch bung opening in the head of the drum. The drum funnel lid was open in a vertical position. The container was not labeled with the words “Hazardous Waste.” The small three-quarter inch bung was not in place in the head of the drum. The image of the open container failed to save to my digital camera memory card.

Portable fire extinguishers are located at the WWTP area, a fire hydrant is located nearby for use by the HollyFrontier Fire Department. Employees handling hazardous waste are provided with two-way radios that can be used to summon assistance. Ms. Sawyer described the HollyFrontier Fire Department responds to spills or releases and is equipped with the equipment necessary for initial response to such incidents.

5.5.2 Wastewater Treatment Plant (WWTP)

HollyFrontier accumulates hazardous waste in a Satellite Accumulation container at both the Stormwater Flume and Small Stormwater Flume at the WWTP area (page 2, attachment 3). I visually inspected the two stormwater flumes on May 10, 2022, accompanied by Mr. Dalluge.

NOPF 4 - 40 CFR 265.173(a): Satellite Accumulation containers not closed, one at Pk Painting, two at WWTP. K.A.R. 28-31-262(a) → 40 CFR 262.34(c)(1)(i)

The requirement at 40 CFR 262.34(c)(1)(i) references the container requirements of 40 CFR Part 265, Subpart I. The requirement at 40 CFR 265.173(a) found in 40 CFR Part 265, Subpart I, Use and Management of Containers, requires in pertinent part *“A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste.”*

I observed one 55-gallon drum located at the east end of the Stormwater Flume (photograph 7, attachment 1). The drum contained Petroleum Refinery Primary Oil/Water/Solids Separation Sludge (EPA waste code F037). I was unable to determine the volume of hazardous waste in the containers during the visual inspection. Mr. Dalluge explained the waste is generated from removing debris from the debris screen in the flume (visible behind container in photograph) with a rake (visible to left of container in photograph). The open head drum had a lid in place without the locking ring in place and latched.

I observed one 55-gallon drum located at the north end of the Small Stormwater Flume (photograph 8, attachment 1). The drum contained Petroleum Refinery Primary Oil/Water/Solids Separation Sludge (EPA waste code F037). I was unable to determine the volume of hazardous waste in the containers during the visual inspection. Mr. Dalluge explained the waste is generated from removing debris from the debris screen in the flume (visible behind container in photograph) with a rake. The open head drum had a lid in place without the locking ring in place and latched.

Both containers were labeled “Hazardous Waste” and were otherwise in good condition.

5.6 Subpart BB Leak Detection and Repair

The EPA promulgated requirements for the control of air emissions from equipment leaks at 40 CFR Part 264/265, Subpart BB (hereafter “Subpart BB”). The State of Kansas has adopted by reference the EPA’s requirements for generators of hazardous waste found at 40 CFR Part 262. I requested a list of equipment at HollyFrontier that was subject to Subpart BB. In response, Mr. Assaf in the record submittal stated, “HollyFrontier El Dorado refining does not operate equipment that are subject to RCRA Subpart BB.”

I did not observe equipment which might be subject to Subpart BB during my visual inspection on May 10 – 11, 2022.

5.7 Subpart CC Container Air Emissions

The EPA promulgated requirements for the control of air emissions from tanks, surface impoundments, and containers at 40 CFR Part 265, Subpart CC (hereafter “Subpart CC”). The State of Kansas has adopted by reference the EPA’s requirements for generators of hazardous waste found at 40 CFR Part 262. HollyFrontier is subject to Subpart CC for containers accumulating hazardous waste (large quantity hazardous waste generator requirements) with an average volatile organic concentration at the point of generation greater than 500 parts

per million by weight. The requirements of Subpart CC vary depending on the size of the container and the concentrations and vapor pressures of organic constituents.

I visually inspected and monitored containers at the Waste Pad on May 10, 2022, accompanied by Ms. Sawyer and Mr. Dalluge. My monitoring followed Method 21 procedures using the EPA FID. Mr. Matthew Carter with APTIM joined us during my visual inspection at the Waste Pad. HollyFrontier has contracted with APTIM to provide onsite volatile organic monitoring services.

5.7.1 18TK Caustic VRB27186

NOPF 5 - 40 CFR 265.1087(d)(1)(ii): Leaking Level 2 container at Waste Pad - 18TK Caustic VRB27186. K.A.R. 28-31-262(a) → 40 CFR 262.34(a)(1)(i)

The requirement at 40 CFR 262.34(a)(1)(i) requires generators accumulating hazardous waste in containers to comply with in pertinent part “... *and the generator complies with the applicable requirements of subparts I, AA, BB, and CC of 40 CFR part 265...*” Subpart CC, 40 CFR 265.1080, *et seq.*, includes requirements for controlling air emissions from tanks, surface impoundments, and containers. I requested records of HollyFrontier’s determination of the material service⁴ of the 18TK Caustic hazardous waste. In response, Mr. Assaf in the record submittal stated, “All containers > 0.46 m³ containing hazardous waste are considered to be subject to 40 CFR 265 Subpart CC regardless of the organic material content.”

The air emission control requirements for Level 2 containers are found at 40 CFR 262.1087(d). HollyFrontier monitors Level 2 containers using Method 21 procedures to determine if a container is operating with no detectable emissions. 40 CFR 265.1087(d)(1)(ii), in pertinent part, requires “*A container that operates with no detectable organic emissions as defined in § 265.1081 of this subpart and determined in accordance with the procedure specified in paragraph (g) of this section.*” No detectable emissions can be summarized as arithmetic difference between the maximum organic concentration indicated by the instrument and the background level shall be compared with the value of 500 parts per million by volume (ppmv) and if the difference is less than 500 ppmv, then the potential leak interface is determined to operate with no detectable organic emissions.

I observed one 25 cubic yard vacuum roll-off at the Waste Pad containing “18TK Caustic” with container number VRB27186 (photograph 23, attachment 1). Ms. Sawyer described the container contents as waste from the decommissioning of a tank and that HollyFrontier had determined the waste to be a hazardous waste due to Toxicity Characteristic Leaching Procedure (TCLP) benzene concentrations (EPA waste code D018). I noted the weight of the hazardous waste in the container from the container label as 10,800 pounds.

At the flange on the east end of the container, I observed volatile organic compound (VOC) emissions with the EPA FID around the circumference of the flange and at the through bolt holes in the flange (photograph 26, attachment 1). The maximum VOC emission observed was 978 ppmv above the background measured VOC level of 3.6 ppmv exceeding the definition of no detectable emissions (attachment 12).

At the flange on the west end of the container, I observed VOC emissions with the EPA FID around the circumference of the flange and at the through bolt holes in the flange (photograph 27, attachment 1). The

⁴ Material service refers to whether the hazardous waste container is “in light material service.” A container is in light material service when the vapor pressure of one or more of the organic constituents in the hazardous waste is greater than 0.3 kilopascals (kPa) at 20 °C; and the total concentration of the pure organic constituents having a vapor pressure greater than 0.3 kPa at 20 °C is equal to or greater than 20 percent by weight.

maximum VOC emission observed was 1,279 ppmv above the background measured VOC level of 3.6 ppmv exceeding the definition of no detectable emissions (attachment 12).

5.7.2 F037 Hazardous Waste, container number RB50162RT

Revised NOPF 6 - 40 CFR 265.1087(d)(1)(ii): Leaking Level 2 container at Waste Pad - WWTS F037 RB50162RT.⁵

In light of Mr. Assaf's statement (see above) that "All containers > 0.46 m³ containing hazardous waste are considered to be subject to 40 CFR 265 Subpart CC regardless of the organic material content," the correct citation for this preliminary finding is "40 CFR 265.1087(d)(1)(ii): Leaking Level 2 container at Waste Pad - WWTS F037 RB50162RT."

I observed one 30 cubic yard roll-off of F037 Hazardous Waste, container number RB50162RT, at the Waste Pad which did not have the tarp covering to top of the container. I did not note the weight of the waste in the container during my visual inspection. When first observed, the end of the tarp covering was flipped up over the top of the container with an observable one-quarter inch gap to the interior of the container. Before a photograph of the aforementioned condition, the wind flipped the tarp covering back down over the end of the container (photograph 14, attachment 1). At the exposed gap to the interior of the container, I observed VOC emissions with the EPA FID of 527 ppmv above the background measured VOC level of 3.6 ppmv exceeding the definition of no detectable emissions (attachment 12).

Sine the preliminary finding included in the NOPF left at the close of the onsite visit was the Subpart CC equivalent open container requirement (see footnote 5), I did not include in my findings a citation of 40 CFR 265.173(a) which requires containers to be closed when accumulating hazardous waste. F037 Hazardous Waste container number RB50162RT at the Waste Pad did not have the tarp fully covering the top of the container. When first observed, the end of the tarp covering was flipped up over the top of the container with a one-quarter inch gap to the interior of the container visible. Before a photograph of the aforementioned condition, the wind flipped the tarp covering back down over the end of the container (photograph 14, attachment 1). Upon closer examination, the elastomeric straps used to secure the tarp covering to the ends of the roll-off were damaged or missing preventing their use. The State of Kansas has adopted by reference the EPA's requirements for generators of hazardous waste found at 40 CFR Part 262. The requirement for large quantity hazardous waste generators accumulating hazardous waste for less than 90 days found at 40 CFR 262.34(a)(1)(i) references the container requirements of 40 CFR Part 265, Subpart I. The requirement at 40 CFR 265.173(a) found in 40 CFR Part 265, Subpart I, Use and Management of Containers, requires in pertinent part "*A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste.*"

5.8 Method 21 Monitoring

I calibrated the EPA FID used for Method 21 monitoring prior to my arrival at the facility on May 10, 2022 (attachment 13). Only the flame ionization detector was calibrated and operated for the Method 21 monitoring, i.e., the photoionization detector was switched off.

⁵ The Notice of Preliminary Findings left at the facility on May 11, 2022, included "NOPF 6 - 40 CFR 265.1087(c)(1)(i): Level 1 container not closed at Waste Pad - WWTS F037 RB50162RT. K.A.R. 28-31-262(a) → 40 CFR 262.34(a)(1)(i)"

HollyFrontier has contracted with APTIM to provide onsite volatile organic monitoring services. I requested calibration record information for Method 21 monitoring for RCRA compliance. I reviewed the APTIM calibration information provided (attachment 14). APTIM calibration uses Zero Air, 500 ppm methane, approximately 2,000 ppm methane and approximately 10,000 ppm methane.

I observed no apparent issues or findings related to review of the APTIM calibration information provided.

5.9 Inspections

HollyFrontier conducts weekly inspections of the less than 90-day hazardous waste accumulation areas. The inspections are documented in a log. I reviewed the inspection logs for the period of January 2019 through the week of my CEI. I obtained copies of the inspection logs for that same period (attachment 15).

I observed no apparent issues or findings related to review of the inspection records provided.

5.10 Contingency Plan

I asked to review the current RCRA Contingency Plan. I was provided an electronic copy of the Contingency Plan (attachment 16).

I observed no apparent issues or findings related to my review of the contingency plan provided.

5.11 Training Requirements

I reviewed personnel training with Ms. Sawyer. Ms. Sawyer described the training required for HollyFrontier employees consists of initial training consisting of instruction and on the job training within six months for new hires and annual computer-based training modules. I obtained copies of the annual computer-based training module content (attachment 17). I obtained training records for 2019 through 2022 (attachment 18).

I observed no apparent issues or findings related to my review of personnel training information provided.

5.12 Manifests

I reviewed hazardous waste manifests information available in EPA's E-Manifest system from June 30, 2018, to present. I requested copies of manifests for January 1, 2021, to the date of my CEI (attachment 19).

I observed no apparent issues or findings related to my review of the provided hazardous waste manifests.

5.13 Universal Waste

HollyFrontier is a small quantity handler of universal waste lamps. Universal waste lamps are accumulated in the Lab Supply Building within the area of the Waste Pad (page 2, attachment 3).

I visually inspected the universal waste lamp accumulation area on May 11, 2022, accompanied by Ms. Sawyer and Mr. Dalluge. I observed boxes of various sizes accumulating universal waste lamps (photograph 14, attachment 1). The boxes were labeled "Waste Lamp(s)," "Universal Waste - Lamp(s)," or "Used Lamp(s)," and had accumulation start dates on each box. Ms. Sawyer stated that the universal waste lamps are shipped off site for recycling once per year.

I observed no apparent issues or findings related to my review of universal waste lamps in the Lab Supply Building.

5.14 Used Oil

HollyFrontier is a generator of used oil. Used oil is generated from the servicing of vehicles and equipment in the Maintenance Building. I visually inspected a used oil tank outside the north end of the Maintenance Building on May 11, 2022, accompanied by Ms. Sawyer and Mr. Dalluge (page 2, attachment 3). I observed used oil being accumulated in an approximately 250-gallon tank inside a containment dike (photograph 9, attachment 1). The tank was in good condition and labeled "Used Oil." Ms. Sawyer stated the used oil is transferred into the refinery where it is included with crude oil to be refined.

I observed no apparent issues or findings related to the management of used oil at the Maintenance Building tank.

6.0 COMPLIANCE ASSISTANCE

I provided and reviewed with Mr. Assaf the following compliance assistance materials:

Section 3007 Inspections Sheet (EPA Handout)

RCRA Facility Access Information Sheet (EPA Handout)

United States Code 1001/1002 Annotated (EPA Handout)

Notice Regarding Proprietary/Confidential Business Information Submitted to or Collected by EPA in Connection with Inspections (EPA Handout)

U.S. EPA Small Business Resource Information Sheet (EPA Handout)

Tampering Pollutes Our Air (EPA Handout)

Clean Air Act Vehicle Aftermarket Defeat Devices and Tampering (EPA Handout)

EPA Enforcement Alert National Compliance Initiative Focus on RCRA Air Emissions June 2020 (EPA Handout)

COMPLIANCE ADVISORY Reduction of Hazardous Waste Air Emissions April 2018 (EPA Handout)

Leak Detection and Repair: A Best Practices Guide (EPA Handout)

Recycling and Disposal of Aerosol Cans, Technical Guidance Document HW-2002-G2 (KDHE Handout)

7.0 SUMMARY

I conducted an inspection of HollyFrontier as a large quantity generator of hazardous waste, small quantity handler of universal waste, and used oil generator. The following preliminary findings are noted as discussed above:

NOPF 1 - 40 Code of Federal Regulations 262.34(a): Storage >90 days – 18TK Caustic VRB27186 @ Waste Pad. K.A.R. 28-31-262(a)

NOPF 2 – 40 CFR 262.34(a)(3): Containers not clearly marked "Hazardous Waste," 2 @ Lab Storage Building, VTUF WWT Contaminated Soil, container number 1085736, VTUF Pad Contaminated Soil, container number RB33481RT. K.A.R. 28-31-262(a)

NOPF 3 – K.A.R. 28-31-262(c)(7): Satellite Accumulation Container not marked "Hazardous Waste," one at PK Painting Enclosure.

NOPF 4 - 40 CFR 265.173(a): Satellite Accumulation containers not closed, one at Pk Painting, two at WWTP. K.A.R. 28-31-262(a) → 40 CFR 262.34(c)(1)(i)

NOPF 5 - 40 CFR 265.1087(d)(1)(ii): Leaking Level 2 container at Waste Pad - 18TK Caustic VRB27186. K.A.R. 28-31-262(a) → 40 CFR 262.34(a)(1)(i)

NOPF 6 - 40 CFR 265.1087(d)(1)(ii): Leaking Level 2 container at Waste Pad - WWTS F037 RB50162RT.

Uncited Potential Finding - 40 CFR 265.173(a): Container at Waste Pad not closed - WWTS F037 container number RB50162RT.

Other than the items noted above, no other preliminary findings were noted. However, the EPA may review my findings further after the inspection, which may change or add to my findings.

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Kenneth Herstowski
Environmental Engineer
RCRA Section, Chemical Branch
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Date

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Amber Whisnant
Chief, RCRA Section, Chemical Branch
Enforcement and Compliance Assurance Division

Date

Attachments

1. Inspection [28] Photographs (29 pages)
2. Photographic Log (2 pages)
3. Aerial Photograph (9 pages)
4. Facility Map (1 page)
5. Notice of Preliminary Findings (3 pages)
6. Receipt for Documents (1 page)
7. Confidentiality Notice (1 page)
8. Records Request (2 pages)
9. Notification Acknowledgement/Verification Report (1 page)
10. Coke WWTP Sludge Bundle Pad Filters Analysis (22 pages)
11. Satellite Accumulation Areas (1 page)
12. Monitoring Field Sheet (1 page)
13. EPA FID Calibration and Precision Information (4 pages)
14. APTIM calibration information (150 pages)
15. Inspection Logs (84 pages)
16. Contingency Plan (15 pages)
17. Training Module (23 pages)
18. Training Records (56 pages)
19. Manifests (194 pages)