REGION 4
ATLANTA, GA 30303

SENT VIA ELECTRONIC MAIL

Michael Ray
Environmental Specialist
Solvay Speciality Polymers USA, LLC.
3702 Clanton Road
Augusta, Georgia 30906
michael.ray@syensqo.com

Dear Michael Ray:

On May 28-29, 2024, the U.S. Environmental Protection Agency Region 4 Air Enforcement Branch conducted a partial compliance inspection of the Solvay Specialty Polymers USA, LLC, located in Augusta, Georgia. Enclosed is a copy of the final inspection report generated by the U.S. Environmental Protection Agency's Region 4, South Air Enforcement Section.

Should you have any questions regarding this inspection report, please contact me at (404) 562-9172, or by email at porter.sharron@epa.gov.

Sincerely,

SHARRON PORTER
Digitally signed by SHARRON PORTER
Date: 2024.07.29 19:51:29 -04'00'

Sharron Porter
Environmental Engineer
South Air Enforcement Section

Enclosures

ENCLOSURE A
FINAL INSPECTION REPORT

United States Environmental Protection Agency (EPA) Region 4
Air Enforcement Branch
Final Inspection Report

I. GENERAL INFORMATION

Facility Name: Solvay Specialty Polymers USA, LLC
Location (Address): 3702 Clanton Road
Augusta, Georgia 30906

Inspection Date: May 28-29, 2024

Type of Inspection (Full or Partial Compliance Evaluation):
Partial Compliance Evaluation

ICIS-Air Number: GA0000001324500126

EPA Investigator(s)/Inspector(s):

1. Sharron Porter, Environmental Engineer, EPA Region 4
2. Daniel Slade, Environmental Engineer, EPA Region 4
3. Baichen Zhong, Environmental Engineer, EPA Region 4

State/Local Investigator(s)/Inspector(s):

1. Gerson Martinez, Environmental Engineer
   Georgia Environmental Protection Division (Georgia EPD)

Person(s) Contacted at Facility (Name and Title):

1. Michael Ray, HSE Manager
2. Justin White, Environmental Specialist

Report Prepared by: Sharron Porter

II. FACILITY INFORMATION

A. Facility and Permit Information

Facility and Permit Information	Comments
1. Type of facility (e.g., chemical plant, refinery, cement manufacturer, etc.).	Polymer Production Facility
2. Air permit number(s) and type of permit (e.g., Title V, PSD, Synthetic Minor, etc.).	Title V Operating Permit Permit No. 2821-245-0126-V-06-0
3. Air permit issuance date.	5/21/2020
4. Air permit expiration date.	5/21/2025
5. Facility classification (Major, Synthetic Minor/Conditional Major, Minor).	Major
6. Major source pollutants (if applicable).	Hazardous Air Pollutants (HAPs) Volatile Organic Compounds (VOCs)
7. Applicable regulations (e.g., State Implementation Plan, MACT Subpart FFFF, NSPS Subpart EEEE, etc.).	40 CFR 63 Subpart FFFF, National Emission Standards for Hazardous Air Pollutants for Miscellaneous Organic Chemical Manufacturing (MON)
8. Types of air emission points (e.g., tanks, process vents, boilers, etc.).	Tanks (feed, mix, storage), Reactors, Boilers, Flare, Extruder
9. Types of air pollution control equipment (e.g., baghouse, scrubber, afterburner, etc.).	Scrubbers, Condensers, Mist Eliminator

B. Process Description (Description from Permit) or attach description provided by the company or excerpts from the permit)

Amodel Process

In the production of Amodel, the raw materials are first mixed together in the feed preparation area and later concentrated and heated before entering the reaction vessel.

After reaction, the Amodel product is sent through an extruder where the molten material is made into small pellets. The pellets are then screened to remove large and small particles before packaging.

Sulfone Process

The production of Sulfone monomer is carried out by the reaction of raw materials in a continuous reactor. The next steps involve processing of the product via solvent extraction and crystallization. The Sulfone product can be produced as a molten material or as a granular product. The final product is stored in bins and is transported in bulk trucks and in 1000-kilogram supersacks.

Xydar Process

The production of Xydar polymer is carried out by the reaction of liquid and solid monomers in a batch reactor. The material from the batch reactors is transferred to a mixing system that allows the polymer to form as a solid. The polymer is then transferred to the final product handling system as a powder and stored in 500-kilogram Gaylord boxes.

Compounding Process

The production of compounds is accomplished by the melting of polymers and additives in extruders. Reinforcement additives are introduced into the melted polymer and formed into pellets. Pellets are cooled, size screened, and stored prior to packing and shipping.

Udel Process

The Udel unit involves the polymerization of Sulfone monomer. The first part of the process, polymerization reaction and dilution, is a batch operation while the remainder of the Udel process is essentially continuous. An extruder then processes polysulfone Udel strands to be pelletized. These pellets are then sent to product storage silos and later packaged into boxes.

Solvent recovery facilities and process condensers will be provided to recover and recycle solvents. Other support facilities that will be provided include utilities, wastewater treatment, and a vent control system for process emission control. (This unit is yet to be constructed.)

PUSH Process

Manufacturing a new product that is classified as an ultraperformance polymer. (This unit is yet to be constructed.)

KetaSpire/NovaSpire Process

Installation of a new unit for manufacturing a new product that is classified as an ultra-performance polymer. The KetaSpire/NovaSpire (previously known as "Jupiter") process involves a batch reaction, solidification, grinding, extraction, washing, slurry filtration, drying, and solvent recovery.

Verian

The production of Verian polymer is carried out by a 4-step process. First, a raw material is processed via evaporation. The resulting material and other additives are then sent to a reaction vessel. The reaction of liquid and additives is completed in a batch reactor. The material from the batch reactors is transferred to a crystallization system that allows the polymer to form as a solid. The polymer is then transferred to the final product handling system as a pellet and stored in Gaylord boxes.

The facility opened in 2001 and has been in the same location. The primary pollutant emitted by the facility is monochloro benzene, which is both a volatile organic and hazardous air pollutant.). Solvay operates four shifts, not counting the rotating (12 hours) days, and employs 300 employees. There are 35 residential contractors onsite. Solvay manufactures sulfone and ketaspire at this facility. Solvay has not made any major modifications or expansions to the process in the last eighteen to twenty-four months. Solvay did submit a name change application in April 2024. The new name is Syensco, which is still owned by Solvay. Solvay has acquired an additional 85 acres. Future plans include the production of Solef PVDF in 2026.

III. INSPECTION ACTIVITIES

Activity	Yes No NA	Comment
Opening Meeting		
1. Date and time entered the facility.	Yes	The EPA inspectors entered the facility on May 28, 2024, at 1:11 pm (EST).
2. Credentials presented to facility personnel (include name and title).	Yes	Upon arrival, the EPA inspectors presented their EPA credentials to the facility personnel, Michael Ray and Justin White.

3. Conducted an opening meeting to explain the purpose and objectives of the inspection.	Yes	The EPA inspectors held an opening conference with Michael Ray and Justin White, and Gerson Martinez with the Georgia EPD. Ziad Husein, Area Manager joined the opening conference later. The purpose and objectives of the inspection were explained during the opening conference. The EPA inspectors pointed out that they were conducting a partial compliance evaluation that was targeting compliance with 40 CFR 63 Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing. Participants at the opening conference filled out an attendance sheet with contact information.
4. Discussed safety issues.	Yes	The EPA inspectors discussed with the facility the personal safety equipment needed to conduct the inspection. The inspection team viewed a Safety Video at 1:36 pm and received a visitor's guide. Information on emergency procedures for the facility were discussed.
5. Discussed which records to be reviewed.	Yes	The EPA inspectors identified records to be reviewed for the evaluation and provided a listing of those records to the facility. Those records included the following: 1. Flare records, including pilot flame, etc. 2. Total process operating hours for the processes at the facility. 3. Fuel oil supplier certification records, including quantity of oil utilized. 4. Daily production rates for processes.

		5. Records of condensers incidences, including carbon filter replacements. 6. Outlet temperatures for the condensers 7. Pressure drop across the scrubbers systems, flow rates 8. Records on waste heat boiler which included operating times, fuel rates, etc. 9. Leak Detection and Repair Reports. 10. Notification and reports required by Subpart FFFF, which included Semiannual reports and Notice of Compliance Status Reports (NOCSR). To make the process more efficient, Solvay was given the option of sending the NOCSR information electronically following the inspection.
6. Discussed the facility walk-through and the areas to be observed in the facility.	Yes	The EPA inspectors discussed the overall inspection plan, which was primarily focused on observing the entire manufacturing process, from start to finish, with an emphasis on the leak detection and repair process areas.
7. Discussed facility policy regarding photographs or video (if applicable).	Yes	The Facility discussed the use of photography and videos in the Sulfone process area.
8. Discussed the use of the infrared camera, TVA, PID, and any other equipment.	Yes	The Inspection Team discussed the use of the FLIR Camera and the TVA in the Sulfone process area.
9. Discussed CBI.	Yes	The EPA inspectors requested that anything that the facility considers to be CBI be identified. The facility would also have an

		opportunity to review the EPA inspection report for CBI content prior to finalizing it. Any information identified as CBI would be treated in accordance with regulations.
Records Reviewed at the Facility		
10. The types of records reviewed, and the time period reviewed.	Yes	The following records were reviewed at the facility: 1. Semiannual report dated February 13, 2024. 2. Tanks in the Amodel and Sulfone processes. The records included the tank number, area, equipment identification, description of contained substance, hazard category. 3. Braswell Oil Fuel Supplier Certification dated December 16, 2024. 4. Sulfone realtime environmental data. 5. Vent Condenser to Carbon Drum Checklist for the months of April and May 2024. 6. 2023 Annual Tune-up Compliance Report for Subpart DDDD. 7. Records of LDAR components. 8. The facility agreed to send the updated report for the PEEK process unit dated 2017. 9. Monthly Title V Air Emissions. 10. Xydar campaigns utilizing Hydroquinone. 11. Xydar, Sulfone Environmental logs, contained information when the

		Waste Heat Boiler was not operating, April and May 2024. 12. Reviewed MON LDAR data, 6 month rolling average for pumps as an example. Solvay uses LEAK DAS. 13. Flare – flame indicator records 14. Solvay agreed to send the NOCSR for review to Sharron Porter electronically by emailed as a follow up to the inspection.
Facility Walk-Through Observations		
11. The process equipment observed, and the associated operational rate observed (e.g., Furnace 1 production rate was 5 lbs/hr on 1/1/15, at 2:00 pm – permit requires max rate at 6 lbs/hr). Provide the date and time the information was recorded by the inspector. Identify the permit limit (if applicable). An attachment may be used for a large amount of information.	N/A	We arrived at the facility on May 29, 2024 at 8:30 am. We calibrated the TVA and turned on the FLIR Camera at 9:39 AM. We entered the facility at 10:02 AM. The facility walk thru started in the Sulfone process unit. Mr. Lee Maxwell, Sulfone Unit Manager and Mr. Ken Weis, Production Manager joined us on the walk thru. Mr. Gabriel Arciniega, LDAR Specialist joined the walk thru. The Inspection Team requested information on all of the LDAR components that were required to be monitored at Solvay. The walk thru started in the Sulfone process area. The Inspection Team utilized the TVA to monitor components. The following Components had readings: Component LF111, L0021.1, near railcar unloading area near the MCB storage tank

		(virgin MCB), was monitored and the value was 520 ppm. Component LD672, connector 13845.02 had a reading of 200 ppm. Component LD672, connector 13848.01 had a reading of 490 ppm. Mr. Arciniega tagged the component and included it on Solvay's Leak Detection and Repair Status Board. The Status Board contained the following information: LDAR Tag Number Equipment ID/Location Notification Work Order Date Leak Detected Repair Status (1st, Final Date of Repair) Comments/Remarks The inspection team utilized the FLIR camera to monitor the components. There were no odors in the vicinity. The FLIR videos were taken in the following areas: 1)LF 1601 Goose Neck Wastewater Storage Tank (Holding) 2) LF 960 Molten Sulfone Storage Tank A log of the FLIR Videos taken during the inspection is attached to the report. The actual videos will be sent to the Facility via GoAnywhere. Please see Enclosure B

12. The type of process parametric monitoring observed and the associated value observed (e.g., Furnace 1 flux injection rate was 200 lbs/batch at 1/1/15, at 2:00 pm – permit requires max rate at 225 lbs/batch). Provide the date and time the information was recorded by the inspector. Identify the permit limit (if applicable). An attachment may be used for a large amount of information.	Yes	Please see Enclosure C: Inspection Observations
13. If process equipment or parametric monitoring equipment was not operating, state the reason by facility personnel why the equipment was not operating.	Yes	Solvay indicated that the following processes were down and not in operation: 1. Amodel 2. Xydair 3. Waste Heat Boiler (last used 11/23 and 12/23, no plans to use)
14. The type of air pollution control equipment, the process equipment it is controlling, and the associated parametric monitoring value observed (e.g., baghouse pressure drop, temperature, scrubber flow rate, etc.). (For example - RTO 1 controlling furnace 1, 1,500 degrees F on	Y	The equipment used for air pollution control can be viewed in Enclosure D, Inspection Observations.

1/1/15, at 2:00 pm – permit requires 1,400 degree F or higher). Provide the date and time the information was recorded by the inspector. Identify the permit limit (if applicable). An attachment may be used for a large amount of information.		
15. Continuous emissions monitoring devices and values observed. (e.g., CEMS, COMs, etc.). Provide the date and time the information was recorded by the inspector. Identify the permit limit (if applicable). An attachment may be used for a large amount of information.	N/A	
16. If air pollution control equipment was not operating, state the reason by facility personnel why the equipment was not operating.	N/A	

17. Capture and collection system (enclosures and hoods) observations, if applicable (e.g., the magnitude and duration of emission escaping capture from the hood).	N/A	
18. Ductwork transferring the emissions to the air pollution control device observations, if applicable (e.g., the magnitude and duration of emission escaping from the ductwork, holes or deterioration in ductwork, no deterioration observed, etc.).	N/A	
19. Any existing unpermitted emission points, new unpermitted emission points, or non-permitted construction activities observed. (if yes, describe in the comments field).	No	
20. Were any visible emissions observed? (if yes, identify the location and equipment).	No	There were no emissions which were visible to the naked eye. There were no odors detected at the facility.

21. Was a Method 9 reading performed? (if yes, identify the location and equipment).	No	
22. Was the cause of the visible emissions investigated and the information documented?	N/A	
23. Was a Method 22 performed for visible emissions? (if yes, identify the location and equipment).	N/A	
24. Identify the cause of the visible emissions as explained by facility personnel, if applicable.	N/A	
25. Was the infrared camera used? If so, attach the video log (which includes the equipment ID, and the date and time the video was recorded) and videos to this report.	Yes	See Enclosure B, FLIR videos taken at the facility.
26. Was the TVA used? If so, identify the equipment monitored and the results. Provide the date and time the information was recorded by the inspector. Include actual instrument readings for each piece of equipment monitored above the leak definition and/or where the	Yes	See Section 11 above

infrared camera identified a release. An attachment may be used for a large amount of information.		
27. Was the PID used? If so, identify how the PID was used and the results. Provide the date and time the information was recorded by the inspector. An attachment may be used for a large amount of information.	N/A	
Closing Meeting		
28. Conducted a closing meeting.	Yes	The EPA inspectors conducted a closing meeting on May 29, 2024, at approximately 12:30 pm EST. The attendees were as follows: Sharron Porter, Daniel Slade, Baichen Zhong, with Gerson Martinez representing the Georgia EPD. Solvay representatives included: Michael Ray, Justin White, Ziad Husein, Brent Evans, Gabriel Arciniega, Lee Maxwell and Adrian Tillman. The close out meeting was conducted at the facility's main office.
29. Summarize any additional information needed, if applicable?	N/A	
30. Accept a declaration of CBI, if applicable?	No	Although the CBI procedures were explained in the opening meeting and at the start of the inspection. A CBI declaration was made

		at the time of the inspection. The following items were marked CBI: A. Sulfone Real time Environmental Data per the permit, including environmental alarm information. B. LDAR data (Components LF111 and LG672) The facility was advised that an inspection report would be sent to them for a CBI review following the inspection.
31. Discussed observations.	Yes	The EPA inspectors discussed the observations made during the inspection and stated that, although no concerns were noted at the time. Solvay asked for a copy of the calibration for the TVA. Solvay also received a list of the documents that were given to EPA. The Inspection Team requested a copy of the Notice of Compliance Status Report.
32. Discussed next steps, if applicable?	Yes	The EPA inspectors stated that an inspection report would be the next step in the process which would cover observations made during the day of the inspection. Solvay would have an opportunity to review the draft report and provide feedback.
33. Date and time inspection concluded.	Yes	The inspection concluded on May 29, 2024, at approximately 1:30 pm EST.

Miscellaneous (Information provided by Solvay after review of the Draft Inspection Report)		Solvay indicated that their consultant is currently working to produce the NOCSR for the PEEK Unit. Solvay also indicated that they are working on a project to capture emissions from the molten storage tanks.
34. Include any additional observations, if applicable.	N/A	

EPA Investigator/Inspector Signature: SHARRON PORTER Digitally signed by SHARRON PORTER Date: 2024.07.29 19:53:02 -04'00'

EPA Supervisor Signature & Title TODD GROENDYKE Digitally signed by TODD GROENDYKE Date: 2024.08.01 13:14:17 -04'00'

Date Report Finalized: _____

Enclosure B FLIR Videos

The following is the log of videos taken during the inspection on May 29, 2024.

FLIR video/still Image file name	Date	Approximate time	Videographer/ photographer	Location	Description and other notes
FLIR0028	5/29/2024	11:40 AM	Daniel Slade	Molten Sulfone Storage Tank	Emissions coming from top of storage tank
FLIR0029	5/29/2024	12:00 PM	Daniel Slade	Sulfone Wastewater Tank (LF-1601)	Video accidentally stopped
FLIR0030	5/29/2024	12:00 PM	Daniel Slade	Sulfone Wastewater Tank (LF-1601)	Emissions coming from goose neck on top of tank

Enclosure C:
Inspection Observations

Enclosure C

Inspection Observations
5/28-29/2024

Emission Unit	Control Device	Parameter Monitor	Permit Limit	Observations
Amodel Process (Down During the Inspection)				
Hot Oil Heater KB-901 (0A17)	None	Visible Emissions (%)	<20%	Process Down
Boiler UB-1210 (0A21)	None	Visible Emissions (%) Steam Flowrate (lb/hr) Steam Pressure (psig)	<20%	Process Down
Flare KB-807 (0A15)	None	Visible Emissions (%) Pilot Flame Indicator	<40%	Process Down
Extruder KM-601 (0A6D)	None	Visible Emissions (%)	<40%	Process Down
	Scrubber KD-633 (0A6B)	Pressure Drop (in H_2O) Flowrate	<5 in H_2O >1 gpm	Process Down
	Seal Drum (KF613)	Exit Temperature (°F)	<220°F	Process Down
	Vacuum Pump (C603)	Exit Temperature (°F)	<220°F	Process Down
Mix Tank KD-260 (0A2B)	None	Visible Emissions (%)	<40%	Process Down
Mix Tank KD-260 (0A2B) Surge Tank KD-266 (0A2C) Concentrator KD-301 (CONC)	Scrubber KT-1001 (A10A)	Pressure Drop (in H_2O) Flowrate	<6 in H_2O >20,000 lb/hr	Process Down
Distillation Still KD-806 (0A9A)	Condenser C-803 (0A8C)	Exit Temperature (°F)	<350°F	Process Down
Sulfone Process				
Hot Oil Heater #1 (00H1)	None	Visible Emissions (%)	<20%	0
Hot Oil Heater #2 (00H2)	None	Visible Emissions (%)	<20%	0

Waste Heat Boiler LM-731 (00B8)	None	Visible Emissions (%) Temperature	<20% >1500°F	Process Down
Railcar Unloading Station (RCU)	None	Visible Emissions (%)	<20%	0
Tank LD-101 (0C1E)	None	Visible Emissions (%)	<40%	0
Reactor LR-201 (0C4D)	None	Visible Emissions (%)	<40%	0
Waste Heat Boiler LM-731 (00B8)	Mist Eliminator (0C7L)	Pressure Drop (in H_2O)	>9 in H_2O	Process Down
Storage Tank LF-111 (0C2B) Storage Tank LF-115 (0C2X)	Condenser (0C2A)	Exit Temperature (°C)	<12.8°C	3.45
Reactor LR-201 (0C4D)	Condenser (0C2G)	Exit Temperature (°C)	<12.8°C	0.62
Reactor Cooler LE-202 (0C2E)	Condenser (0C2L)	Exit Temperature (°C)	<12.8°C	0.98
Tower LT-302 (0C3C) Reactor LR-380 (R380)	Condenser (0C5A)	Exit Temperature (°C)	<12.8°C	3.01

Emission Unit	Control Device	Parameter Monitor	Permit Limit	Observations
Feed Tank LD-458 (0C4I) Feed Tank LD-401 (0C6F)	Condenser (0C6A)	Exit Temperature (°C)	<12.8°C	1.97
Tower LT-460 (0C6G)	Condenser (0C6C)	Exit Temperature (°C)	<12.8°C	2.40
Feed Tank LD-501 (0C5F) Tank LD-325 (0C5G) Tank LD-601 (0C6J) Feed Tank LD-621 (0C6K) Tank LD-651 (0C6L) Tank LD-701 (0C7D) Storage Drum LD-751 (0C7E) Tank LD-814 (0C8C) Tank LD-852 (0C8F) Drum LD-1201 (C10H) Drum LD-712 (0C7F) Tank LD-645 (0C64)	Condenser (0C7A)	Exit Temperature (°C)	<12.8°C	2.88
Storage Tank LD-310 (0C5D) Storage Tank LD-314 (0C5E)	Condenser (0C5B)	Exit Temperature (°C)	<12.8°C	1.91

Extraction Tower LT-445 (0C7G) Acid Extraction Column II LT485 (T485) Acid Extraction Column II Bottoms Cleaner LH-487 (H487) Sulfone Neutralization and Wash Column II LT-495 (T495) Sulfone Neutralization and Wash Column II Bottoms Coalescer LH-497 (H497)	Condenser (0C7B)	Exit Temperature (°C)	<12.8°C	0.74
LD505 Crude Crystallizer Feed Drum (D505) LD531 Crude Crystallizer (D531) LM542 Crude Centrifuge (M542) LD551 Crude Reslurry Tank (D551)	Condenser (D576)	Exit Temperature (°C)	<12.8°C	3.90
Tank LD-101 (0C1E)	Scrubber (0C1A)	Pressure Drop (in H_2O)	<20 in H_2O	0.2
Waste Heat Boiler LM-731 (00B8)	Scrubber (0C8A)	Pressure Drop (in H_2O)	<10 in H_2O	Process Down
	Scrubber (0C8B)	Pressure Drop (in H_2O) Flowrate pH	<10 in H_2O >27,850 lb/hr >7	Process Down

Xydar Process (Down During Inspection)

Hot Oil Heater H-601 (00P1)	None	Visible Emissions (%)	<20%	Process Down
Hot Oil Heater H-603 (00P2)	None	Visible Emissions (%)	<20%	Process Down
Boiler H-602 (00P3)	None	Visible Emissions (%)	<20%	Removed
Boiler H-604 (00P4)	None	Visible Emissions (%)	<20%	Removed
Emission Unit	**Control Device**	**Parameter Monitor**	**Permit Limit**	**Observations**
Reactors R-201 A/B/C (RX01)	None	Visible Emissions (%)	<40%	Process Down
Mixer R-202A (0X2G)	None	Visible Emissions (%)	<40%	Process Down
Mixer R-202B (0X2H)	None	Visible Emissions (%)	<40%	Process Down
Mixer R-202C (0X2I)	None	Visible Emissions (%)	<40%	Process Down

Reactors R-201 A/B/C (RX01) Mixer R-202A (0X2G) Mixer R-202B (0X2H) Mixer R-202C (0X2I)	Scrubber (0X2T)	Pressure Drop (in H_2O) Flowrate pH	<15 in H_2O >120 gpm >9	Process Down

Udel Process

Udel Thermal Oxidizer (00C2)	None	Visible Emissions (%) Temperature (°F)	<40% >1600°F	Not Built
Reactor PR-401 (0U4D)	None	Visible Emissions (%)	<40%	Not Built-
Tank PD-411 (0U4A) Tank PD-412 (0U4B) Tank PD-603 (0U6A) Tank PD-604 (0U6B) Udel Thermal Oxidizer (00C2) Reactor PR-401 (0U4D) Column PT-715 (0U7I) Drum PD-425 (0U4E) Tank PD-202 (0U2A) Tank PD-503 (0U5C) Tank PD-730 (0U7G)	Scrubber (00C3)	Pressure Drop (in H_2O) Flowrate pH	>5 in H_2O >10 gpm >7	Not Built-

KetaSpire/NovaSpire (also known as Jupiter (PEEK) Process)

Hot Oil Heater (BE-01)	None	Visible Emissions (%)	<20%	
Boiler (BE-02)	None	Visible Emissions (%) Steam Flowrate (lb/hr) Steam Pressure (psig)	<20%	
Emission Unit Group HE-2 Process Reactor (PR-200)	Scrubber (SC1)	Pressure Drop (in H_2O)	<15 in H_2O	0.1
Emission Unit Group HE-1 HCL Storage Tank (PF-800)	Scrubber (SC2)	Pressure Drop (in H_2O)	<15 in H_2O	0.8

Push Process (Not Built)

Unit FD-1210: 2,5-DCBP Mix Tank (FD02)	Scrubber (FT01)	Pressure Drop (in H_2O) pH	<15 in H_2O >7	Not Built
Unit FR-200: Digestion Tank(FD08)	Scrubber (FT02)	Pressure Drop (in H_2O) pH	<15 in H_2O >7	Not Built
	Carbon Drum Membrane (FA03)	Pressure Drop (in H_2O)	<90 psia	Not Built
Unit FR-400 through Unit FR-805 and Unit FF-705 through Unit FF-800	Scrubber (FT03)	Pressure Drop (in H_2O)	<15 in H_2O	Not Built