State of Mississippi

FEDERALLY ENFORCEABLE AIR POLLUTION CONTROL PERMIT

Permit to Operate Air Emissions Equipment at a Synthetic Minor Source

THIS CERTIFIES

Polychemie Inc

Port Bienville Industrial Park, Road D

Pearlington, MS

Hancock County

has been granted permission to operate air emissions equipment in accordance with emission limitations, monitoring requirements and conditions set forth herein. This permit is issued in accordance with the Federal Clean Air Act and the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. set., Mississippi Code of 1972), the regulations and standards adopted and promulgated thereunder, and the State Implementation Plan for operating permits for synthetic minor sources.

Mississippi Environmental Quality Permit Board

Mississippi Department of Environmental Quality

Issued/Modified: APR 0 6 2017

Expires: JUL 3 1 2019

Permit No. 1000-00042

Agency Interest # 83

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Permit to Operate Air Emissions Equipment at a Synthetic Minor Source

Polychemie Inc

Subject Item Inventory

Permit Number: 1000-00042

Activity ID No.: PER20170001

Subject Item Inventory:

ID	Designation	Description
EQPT1	AA-001	25.1 MMBtu/hr Natural Gas-Fired Boiler (B-100)
EQPT2	AA-002	13.4 MMBtu/hr Natural Gas-Fired Boiler (B-101)
EQPT3	AA-003	13.4 MMBtu/hr Natural Gas-Fired Boiler (B-102) (Upon certification of construction)
EQPT112	AA-004	755 hp Diesel Fuel Fired Emergency Generator
AREA1	AA-050	DADMAC Production Lines (P-1A through P-1J) (Lines P-1H through P-1J are proposed)
AREA9	AA-100	Polyamine Process Lines (P-2A, P-2B, P-2C, P-2D, P-2E, and P-2F): These lines include the following equipment: Reactors (R-901 through R-906) and Blend Vessels (V-901 through V-904) (Lines P-2D through P-2F are proposed.)
AREA13	AA-401	Ethylenedichloride (EDC)-Ammonia Polyamine Process Line, including a Reactor (R-401), Receiver Vessel (V-401), Distillation Column (D-401), and Centrifuge (C-401)
EQPT4	AA-501	Wet Strength Process Line, including a Reactor (R-501) and Product Vessel (V-501)
EQPT15	AA-502	Miscellaneous Polymer Reactor (R-502) and Polymer Blend Vessel (V-502) for production of Alkylamine-Epichlorohydrin (A-E) polymer, Epiamines, Mannich polymer, p-(DMG-DETA)-Epi Polymer, and other miscellaneous polymers
AREA11	AA-510	Polymethyl Diallyl Amine (p-MDAA) Process Line, including a Monomer Reactor (R-510), Light Cut Distillate Receiver (V-510), Light Cut Distillation Column (D-510), and Polymer Reactor (R-511) (Upon certification of construction)
AREA12	AA-520	p-(DMG-DETA)-Epi Prepolymer Process, including Monomer Reactor (R-520) and Light Cut Receiver Vessel (V-520) (Upon certification of construction)
CONT1	AB-100	Thermal Oxidizer (TO-100), controlling emissions from the DADMAC Process Lines, the EDC-Ammonia process, the Polymethyl Diallyl Amine (p-MDAA) Process, the p-(DMG-DETA)-Epi Prepolymer Process, and the Hazardous Waste Storage Tanks. Emissions from the thermal oxidizer are routed to the packed tower scrubber S-TO100 (Emission Point AC-100)
CONT2	AB-200	Thermal Oxidizer (TO-200), controlling emissions from the DADMAC Process Lines, the EDC-Ammonia process, the Polymethyl Diallyl Amine (p-MDAA) Process, the p-(DMG-DETA)-Epi Prepolymer Process, and the Hazardous Waste Tanks. Emissions from the thermal oxidizer are routed to the Venturi, packed tower scrubber S-TO200 (Emission Point AC-200) (Upon certification of construction)
CONT3	AC-100	Packed Tower Scrubber (S-TO100) controlling emissions from the Thermal Oxidizer (Emission Point AB-100)
CONT4	AC-101	Venturi, Packed Tower Scrubber (SC-901) with mist eliminator, controlling emissions from the Polyamine Process

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CONT5	AC-200	Venturi, Packed Tower Scrubber (S-TO200) with mist eliminator, controlling emissions from the Thermal Oxidizer (Emission Point AB-200) (Upon certification of construction)
CONT7	AC-400	Venturi, Packed Tower Scrubber (HSV-30-PP) with mist eliminator, controlling emissions from the Hydrochloric Acid Tank (T-6)
CONT8	AC-500	Venturi, Packed Tower Scrubber (HSV-40-PP) with mist eliminator, controlling emissions from the Hydrochloric Acid Tank (T-34) (Upon certification of construction)
CONT9	AC-502	Water Scrubber (SC-502) controlling emissions from Reactor R-502 for production of Alkylamine-Epichlorohydrin (A-E) polymer, Epiamines, p-(DMG-DETA)-Epi Polymer, Mannich polymer, and other miscellaneous polymers
EQPT17	AD-001	Allyl Chloride Tank (T-1): 35,000-gallon pressurized tank
EQPT18	AD-002	Allyl Chloride Tank (T-2): 35,000-gallon pressurized tank
EQPT19	AD-003	Dimethylamine Tank (T-3): 35,000-gallon pressurized tank
EQPT20	AD-004	Dimethylamine Tank (T-4): 37,628-gallon pressurized tank
EQPT21	AD-006	Hydrocholoric Acid Tank (T-6): 6,000-gallon fixed roof tank venting to a scrubber (AC-400)
EQPT22	AD-007	Glyoxal Tank, 40% (T-7): 10,000-gallon fixed roof tank
EQPT23	AD-009	Wet Strength Base Storage Tank (T-9): 6,220-gallon fixed roof tank
EQPT24	AD-010	Wet Strength Base Storage Tank (T-10): 6,220-gallon fixed roof tank
EQPT25	AD-011	Epichlorohydrin Tank (T-11): 35,000-gallon fixed roof tank
EQPT26	AD-013	Ethylenediamine Tank (T-13): 8,000-gallon fixed roof tank
EQPT27	AD-014	Sodium Bisulfite Tank, 40% (T-14): 10,000-gallon fixed roof tank
EQPT28	AD-015	Prepolymer Tank (T-15): 6,000-gallon fixed roof tank
EQPT29	AD-018	Ethylene Dichloride (EDC) Tank (T-18): 35,000-gallon pressurized tank
EQPT30	AD-019	Aqueous Ammonia, 30% (T-19): 17,460-gallon pressurized tank
EQPT31	AD-020	Weak Ammonia Tank (T-20): 6,000-gallon fixed roof tank

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ID	Designation	Description
EQPT32	AD-021	Polyamine Tank (T-21): 7,044-gallon fixed roof tank
EQPT33	AD-022	Monomethylamine (MMA) Tank (T-22): 37,628-gallon pressurized tank (Upon certification of construction)
EQPT34	AD-023	Diethylenetriamine (DETA) Tank (T-23): 7,044-gallon fixed roof tank (Upon certification of construction)
EQPT35	AD-024	Dimethyl Glutarate (DMG) or Poly(aminoamide) Prepolymer Tank (T-24): 7,044-gallon fixed roof tank (Upon certification of construction)
EQPT88	AD-030	Allyl Chloride Tank (T-30): 35,000-gallon pressurized tank (Upon certification of construction)
EQPT89	AD-031	Allyl Chloride Tank (T-31): 35,000-gallon pressurized tank (Upon certification of construction)
EQPT90	AD-032	Dimethylamine Tank (T-32): 37,628-gallon pressurized tank (Upon certification of construction)
EQPT91	AD-033	Dimethylamine Tank (T-33): 37,628-gallon pressurized tank (Upon certification of construction)
EQPT92	AD-034	Hydrochloric Acid Tank (T-34): 10,000-gallon fixed roof tank venting to a scrubber (AC-500) (Upon certification of construction)
EQPT113	AD-035	Epichlorohydrin Tank (T-35): 35,000-gallon fixed roof tank
EQPT114	AD-036	Ethylenediamine Tank (T-36): 10,000-gallon fixed roof tank
EQPT132	AD-037	Formaldehyde Tank (T-37): 6,000-gallon fixed roof tank (Upon certification of construction)
EQPT36	AD-105	Glycol/Water Tank (T-105): 7,000-gallon fixed roof tank
EQPT37	AD-106	Recycle Water Tanks: 11 (including 3 proposed) fixed roof tanks ranging from 1,000 gallons to 12,000 gallons, including T-106 through T-112 and T-120 though T-123
EQPT44	AD-113	Wastewater Check Tank (T-113): 6,000-gallon fixed roof tank
EQPT128	AD-124	Diesel (for generator) Tank (T-124): 1,700-gallon fixed roof tank
EQPT129	AD-143	Recycled Polymer Tank (T-143): 5,500-gallon fixed roof tank
EQPT130	AD-200	Diesel Tank (T-200): 550-gallon fixed roof tank

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EQPT131	AD-201	Gasoline Tank (T-201): 250-gallon fixed roof tank
EQPT45	AD-301	Miscellaneous Polymer Tanks: 11 proposed fixed roof tanks, ranging from 5,870 gallons to 20,280 gallons, including Tanks T-301 through T-311
EQPT57	AD-401	Miscellaneous Monomer/Polymer Tanks: Fixed roof tanks ranging from 12,000 gallons to 20,000 gallons, including the following: T-312 (proposed), T-401 through T-404, T-801 through T-811, T-812 through T-829 (proposed), T-832 through T-844 (proposed), T-901 through T-907, T-908 through T-921 (proposed)
EQPT61	AD-510	MDAA Monomer Tank (T-510): 12,000-gallon fixed roof tank (Upon certification of construction)
EQPT77	AD-830	Hazardous Waste Tank (T-830): 2,100-gallon fixed roof tank with emissions routed to either Thermal Oxidizer TO-100 (AB-100) or Thermal Oxidizer TO-200 (AB-200). The tank contains unreacted allyl chloride, salt, and reaction byproducts.
EQPT111	AD-831	Hazardous Waste Tank (T-831): 6,000-gallon fixed roof tank with emissions routed to either Thermal Oxidizer TO-100 (AB-100) or Thermal Oxidizer TO-200 (AB-200). The tank contains unreacted allyl chloride, salt, and reaction byproducts. (Upon certification of construction)
AREA16	Fugitives	Fugitives from Equipment Leaks
AI83	83	Water treatment polymers production facility

Subject Item Groups:

ID	Description	Components
GRPT1	Emission Points AA-001, AA-002, and AA-003 (Three Natural Gas-Fired Boilers)	EQPT1 25.1 MMBtu/hr Natural Gas-Fired Boiler (B-100)
		EQPT2 13.4 MMBtu/hr Natural Gas-Fired Boiler (B-101)
		EQPT3 13.4 MMBtu/hr Natural Gas-Fired Boiler (B-102) (Upon certification of construction)

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Subject Item Groups:

ID	Description	Components
GRPT3	Pressurized Tanks	EQPT17 Allyl Chloride Tank (T-1): 35,000-gallon pressurized tank
		EQPT18 Allyl Chloride Tank (T-2): 35,000-gallon pressurized tank
		EQPT19 Dimethylamine Tank (T-3): 35,000-gallon pressurized tank
		EQPT20 Dimethylamine Tank (T-4): 37,628-gallon pressurized tank
		EQPT29 Ethylene Dichloride (EDC) Tank (T-18): 35,000-gallon pressurized tank
		EQPT30 Aqueous Ammonia, 30% (T-19): 17,460-gallon pressurized tank
		EQPT33 Monomethylamine (MMA) Tank (T-22): 37,628-gallon pressurized tank (Upon certification of construction)
		EQPT88 Allyl Chloride Tank (T-30): 35,000-gallon pressurized tank (Upon certification of construction)
		EQPT89 Allyl Chloride Tank (T-31): 35,000-gallon pressurized tank (Upon certification of construction)
		EQPT90 Dimethylamine Tank (T-32): 37,628-gallon pressurized tank (Upon certification of construction)
		EQPT91 Dimethylamine Tank (T-33): 37,628-gallon pressurized tank (Upon certification of construction)

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Subject Item Groups:

ID	Description	Components
GRPT4	Tanks with Dedicated Vapor Balance	EQPT17 Allyl Chloride Tank (T-1): 35,000-gallon pressurized tank
		EQPT18 Allyl Chloride Tank (T-2): 35,000-gallon pressurized tank
		EQPT19 Dimethylamine Tank (T-3): 35,000-gallon pressurized tank
		EQPT20 Dimethylamine Tank (T-4): 37,628-gallon pressurized tank
		EQPT25 Epichlorohydrin Tank (T-11): 35,000-gallon fixed roof tank
		EQPT26 Ethylenediamine Tank (T-13): 8,000-gallon fixed roof tank
		EQPT33 Monomethylamine (MMA) Tank (T-22): 37,628-gallon pressurized tank (Upon certification of construction)
		EQPT88 Allyl Chloride Tank (T-30): 35,000-gallon pressurized tank (Upon certification of construction)
		EQPT89 Allyl Chloride Tank (T-31): 35,000-gallon pressurized tank (Upon certification of construction)
		EQPT90 Dimethylamine Tank (T-32): 37,628-gallon pressurized tank (Upon certification of construction)
		EQPT91 Dimethylamine Tank (T-33): 37,628-gallon pressurized tank (Upon certification of construction)
		EQPT113 Epichlorohydrin Tank (T-35): 35,000-gallon fixed roof tank
		EQPT114 Ethylenediamine Tank (T-36): 10,000-gallon fixed roof tank
		EQPT132 Formaldehyde Tank (T-37): 6,000-gallon fixed roof tank (Upon certification of construction)
GRPT5	Thermal Oxidizers including AB-100 and AB-200	CONT1 Thermal Oxidizer (TO-100), controlling emissions from the DADMAC Process Lines, the EDC-Ammonia process, the Polymethyl Diallyl Amine (p-MDAA) Process, the p-(DMG-DETA)-Epi Prepolymer Process, and the Hazardous Waste Storage Tanks. Emissions from the thermal oxidizer are routed to the packed tower scrubber S-TO100 (Emission Point AC-100)
		CONT2 Thermal Oxidizer (TO-200), controlling emissions from the DADMAC Process Lines, the EDC-Ammonia process, the Polymethyl Diallyl Amine (p-MDAA) Process, the p-(DMG-DETA)-Epi Prepolymer Process, and the Hazardous Waste Tanks. Emissions from the thermal oxidizer are routed to the Venturi, packed tower scrubber S-TO200 (Emission Point AC-200) (Upon certification of construction)

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Subject Item Groups:

ID	Description	Components
GRPT6	Scrubbers including AC-100, AC-101, AC-200, AC-400, and AC-500	CONT3 Packed Tower Scrubber (S-TO100) controlling emissions from the Thermal Oxidizer (Emission Point AB-100)
		CONT4 Venturi, Packed Tower Scrubber (SC-901) with mist eliminator, controlling emissions from the Polyamine Process
		CONT5 Venturi, Packed Tower Scrubber (S-TO200) with mist eliminator, controlling emissions from the Thermal Oxidizer (Emission Point AB-200) (Upon certification of construction)
		CONT7 Venturi, Packed Tower Scrubber (HSV-30-PP) with mist eliminator, controlling emissions from the Hydrochloric Acid Tank (T-6)
		CONT8 Venturi, Packed Tower Scrubber (HSV-40-PP) with mist eliminator, controlling emissions from the Hydrochloric Acid Tank (T-34) (Upon certification of construction)

Relationships:

Subject Item	Relationship	Subject Item
CONT1 Thermal Oxidizer (TO-100), controlling emissions from the DADMAC Process Lines, the EDC-Ammonia process, the Polymethyl Diallyl Amine (p-MDAA) Process, the p-(DMG-DETA)-Epi Prepolymer Process, and the Hazardous Waste Storage Tanks. Emissions from the thermal oxidizer are routed to the packed tower scrubber S-TO100 (Emission Point AC-100)	Controls	AREA1 DADMAC Production Lines (P-1A through P-1J) (Lines P-1H through P-1J are proposed)
CONT1 Thermal Oxidizer (TO-100), controlling emissions from the DADMAC Process Lines, the EDC-Ammonia process, the Polymethyl Diallyl Amine (p-MDAA) Process, the p-(DMG-DETA)-Epi Prepolymer Process, and the Hazardous Waste Storage Tanks. Emissions from the thermal oxidizer are routed to the packed tower scrubber S-TO100 (Emission Point AC-100)	Controls	AREA13 Ethylenedichloride (EDC)-Ammonia Polyamine Process Line, including a Reactor (R-401), Receiver Vessel (V-401), Distillation Column (D-401), and Centrifuge (C-401)

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Relationships:

Subject Item	Relationship	Subject Item
CONT1 Thermal Oxidizer (TO-100), controlling emissions from the DADMAC Process Lines, the EDC-Ammonia process, the Polymethyl Diallyl Amine (p-MDAA) Process, the p-(DMG-DETA)-Epi Prepolymer Process, and the Hazardous Waste Storage Tanks. Emissions from the thermal oxidizer are routed to the packed tower scrubber S-TO100 (Emission Point AC-100)	Controls	EQPT77 Hazardous Waste Tank (T-830): 2,100-gallon fixed roof tank with emissions routed to either Thermal Oxidizer TO-100 (AB-100) or Thermal Oxidizer TO-200 (AB-200). The tank contains unreacted allyl chloride, salt, and reaction byproducts.
CONT1 Thermal Oxidizer (TO-100), controlling emissions from the DADMAC Process Lines, the EDC-Ammonia process, the Polymethyl Diallyl Amine (p-MDAA) Process, the p-(DMG-DETA)-Epi Prepolymer Process, and the Hazardous Waste Storage Tanks. Emissions from the thermal oxidizer are routed to the packed tower scrubber S-TO100 (Emission Point AC-100)	Controls	EQPT111 Hazardous Waste Tank (T-831): 6,000-gallon fixed roof tank with emissions routed to either Thermal Oxidizer TO-100 (AB-100) or Thermal Oxidizer TO-200 (AB-200). The tank contains unreacted allyl chloride, salt, and reaction byproducts. (Upon certification of construction)
CONT1 Thermal Oxidizer (TO-100), controlling emissions from the DADMAC Process Lines, the EDC-Ammonia process, the Polymethyl Diallyl Amine (p-MDAA) Process, the p-(DMG-DETA)-Epi Prepolymer Process, and the Hazardous Waste Storage Tanks. Emissions from the thermal oxidizer are routed to the packed tower scrubber S-TO100 (Emission Point AC-100)	Controls	AREA11 Polymethyl Diallyl Amine (p-MDAA) Process Line, including a Monomer Reactor (R-510), Light Cut Distillate Receiver (V-510), Light Cut Distillation Column (D-510), and Polymer Reactor (R-511) (Upon certification of construction)
CONT1 Thermal Oxidizer (TO-100), controlling emissions from the DADMAC Process Lines, the EDC-Ammonia process, the Polymethyl Diallyl Amine (p-MDAA) Process, the p-(DMG-DETA)-Epi Prepolymer Process, and the Hazardous Waste Storage Tanks. Emissions from the thermal oxidizer are routed to the packed tower scrubber S-TO100 (Emission Point AC-100)	Controls	AREA12 p-(DMG-DETA)-Epi Prepolymer Process, including Monomer Reactor (R-520) and Light Cut Receiver Vessel (V-520) (Upon certification of construction)
CONT2 Thermal Oxidizer (TO-200), controlling emissions from the DADMAC Process Lines, the EDC-Ammonia process, the Polymethyl Diallyl Amine (p-MDAA) Process, the p-(DMG-DETA)-Epi Prepolymer Process, and the Hazardous Waste Tanks. Emissions from the thermal oxidizer are routed to the Venturi, packed tower scrubber S-TO200 (Emission Point AC-200) (Upon certification of construction)	Controls	AREA1 DADMAC Production Lines (P-1A through P-1J) (Lines P-1H through P-1J are proposed)

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CONT2 Thermal Oxidizer (TO-200), controlling emissions from the DADMAC Process Lines, the EDC-Ammonia process, the Polymethyl Diallyl Amine (p-MDAA) Process, the p-(DMG-DETA)-Epi Prepolymer Process, and the Hazardous Waste Tanks. Emissions from the thermal oxidizer are routed to the Venturi, packed tower scrubber S-TO200 (Emission Point AC-200) (Upon certification of construction)	Controls	AREA11 Polymethyl Diallyl Amine (p-MDAA) Process Line, including a Monomer Reactor (R-510), Light Cut Distillate Receiver (V-510), Light Cut Distillation Column (D-510), and Polymer Reactor (R-511) (Upon certification of construction)
CONT2 Thermal Oxidizer (TO-200), controlling emissions from the DADMAC Process Lines, the EDC-Ammonia process, the Polymethyl Diallyl Amine (p-MDAA) Process, the p-(DMG-DETA)-Epi Prepolymer Process, and the Hazardous Waste Tanks. Emissions from the thermal oxidizer are routed to the Venturi, packed tower scrubber S-TO200 (Emission Point AC-200) (Upon certification of construction)	Controls	AREA12 p-(DMG-DETA)-Epi Prepolymer Process, including Monomer Reactor (R-520) and Light Cut Receiver Vessel (V-520) (Upon certification of construction)
CONT2 Thermal Oxidizer (TO-200), controlling emissions from the DADMAC Process Lines, the EDC-Ammonia process, the Polymethyl Diallyl Amine (p-MDAA) Process, the p-(DMG-DETA)-Epi Prepolymer Process, and the Hazardous Waste Tanks. Emissions from the thermal oxidizer are routed to the Venturi, packed tower scrubber S-TO200 (Emission Point AC-200) (Upon certification of construction)	Controls	EQPT111 Hazardous Waste Tank (T-831): 6,000-gallon fixed roof tank with emissions routed to either Thermal Oxidizer TO-100 (AB-100) or Thermal Oxidizer TO-200 (AB-200). The tank contains unreacted allyl chloride, salt, and reaction byproducts. (Upon certification of construction)
CONT2 Thermal Oxidizer (TO-200), controlling emissions from the DADMAC Process Lines, the EDC-Ammonia process, the Polymethyl Diallyl Amine (p-MDAA) Process, the p-(DMG-DETA)-Epi Prepolymer Process, and the Hazardous Waste Tanks. Emissions from the thermal oxidizer are routed to the Venturi, packed tower scrubber S-TO200 (Emission Point AC-200) (Upon certification of construction)	Controls	AREA13 Ethylenedichloride (EDC)-Ammonia Polyamine Process Line, including a Reactor (R-401), Receiver Vessel (V-401), Distillation Column (D-401), and Centrifuge (C-401)

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CONT2 Thermal Oxidizer (TO-200), controlling emissions from the DADMAC Process Lines, the EDC-Ammonia process, the Polymethyl Diallyl Amine (p-MDAA) Process, the p-(DMG-DETA)-Epi Prepolymer Process, and the Hazardous Waste Tanks. Emissions from the thermal oxidizer are routed to the Venturi, packed tower scrubber S-TO200 (Emission Point AC-200) (Upon certification of construction)	Controls	EQPT77 Hazardous Waste Tank (T-830): 2,100-gallon fixed roof tank with emissions routed to either Thermal Oxidizer TO-100 (AB-100) or Thermal Oxidizer TO-200 (AB-200). The tank contains unreacted allyl chloride, salt, and reaction byproducts.
CONT3 Packed Tower Scrubber (S-TO100) controlling emissions from the Thermal Oxidizer (Emission Point AB-100)	Controls	CONT1 Thermal Oxidizer (TO-100), controlling emissions from the DADMAC Process Lines, the EDC-Ammonia process, the Polymethyl Diallyl Amine (p-MDAA) Process, the p-(DMG-DETA)-Epi Prepolymer Process, and the Hazardous Waste Storage Tanks. Emissions from the thermal oxidizer are routed to the packed tower scrubber S-TO100 (Emission Point AC-100)
CONT4 Venturi, Packed Tower Scrubber (SC-901) with mist eliminator, controlling emissions from the Polyamine Process	Controls	AREA9 Polyamine Process Lines (P-2A, P-2B, P-2C, P-2D, P-2E, and P-2F): These lines include the following equipment: Reactors (R-901 through R-906) and Blend Vessels (V-901 through V-904) (Lines P-2D through P-2F are proposed.)
CONT5 Venturi, Packed Tower Scrubber (S-TO200) with mist eliminator, controlling emissions from the Thermal Oxidizer (Emission Point AB-200) (Upon certification of construction)	Controls	CONT2 Thermal Oxidizer (TO-200), controlling emissions from the DADMAC Process Lines, the EDC-Ammonia process, the Polymethyl Diallyl Amine (p-MDAA) Process, the p-(DMG-DETA)-Epi Prepolymer Process, and the Hazardous Waste Tanks. Emissions from the thermal oxidizer are routed to the Venturi, packed tower scrubber S-TO200 (Emission Point AC-200) (Upon certification of construction)
CONT7 Venturi, Packed Tower Scrubber (HSV-30-PP) with mist eliminator, controlling emissions from the Hydrochloric Acid Tank (T-6)	Controls	EQPT21 Hydrocholoric Acid Tank (T-6): 6,000-gallon fixed roof tank venting to a scrubber (AC-400)
CONT8 Venturi, Packed Tower Scrubber (HSV-40-PP) with mist eliminator, controlling emissions from the Hydrochloric Acid Tank (T-34) (Upon certification of construction)	Controls	EQPT92 Hydrochloric Acid Tank (T-34): 10,000-gallon fixed roof tank venting to a scrubber (AC-500) (Upon certification of construction)

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CONT9 Water Scrubber (SC-502) controlling emissions from Reactor R-502 for production of Alkylamine-Epichlorohydrin (A-E) polymer, Epiamines, p-(DMG-DETA)-Epi Polymer, Mannich polymer, and other miscellaneous polymers	Controls	EQPT15 Miscellaneous Polymer Reactor (R-502) and Polymer Blend Vessel (V-502) for production of Alkylamine-Epichlorohydrin (A-E) polymer, Epiamines, Mannich polymer, p-(DMG-DETA)-Epi Polymer, and other miscellaneous polymers

KEY

ACT = Activity

AI = Agency Interest

AREA = Area

CAFO = Concentrated Animal Feeding Operation

CONT = Control Device

EQPT = Equipment

IA = Insignificant Activity

IMPD = Impoundment

MAFO = Animal Feeding Operation

PCS = PCS

RPNT = Release Point

TRMT = Treatment

WDPT = Withdrawal Point

EQPT0000000112 (AA-004) 755 hp Diesel Fuel Fired Emergency Generator:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		For Emission Point AA-004, the permittee shall comply with the emission standards for new nonroad compression ignition (CI) engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power. The permittee shall comply with these standards by purchasing an engine certified to the applicable emission standards for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications. [40 CFR 60.4205(b), 40 CFR 60.4211(c)]
L-2		The permittee must operate and maintain the engine according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer over the entire life of the engine. In addition, the permittee may only change those settings that are permitted by the manufacturer. [40 CFR 60.4206, 40 CFR 60.4211(a)]
L-3		For Emission Point AA-004, the permittee shall use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. [40 CFR 60.4207(b)]

EQPT0000000112 (AA-004) 755 hp Diesel Fuel Fired Emergency Generator:

Limitation Requirements:

Condition No.	Parameter	Condition
L-4		For Emission Point AA-004, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year is prohibited. (1) There is no time limit on the use of emergency stationary ICE in emergency situations. (2) The engine may be operated for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed in (3) below counts as part of the 100 hours per calendar year. Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. (3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 60.4211(f)]

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1		For Emission Point AA-004, the permittee shall install a non-resettable hour meter. [40 CFR 60.4209(a)]

EQPT0000000112 (AA-004) 755 hp Diesel Fuel Fired Emergency Generator:

Narrative Requirements:

Condition No.	Condition
T-1	For Emission Point AA-004, the permittee is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (i.e., the "RICE MACT"), 40 CFR Part 63, Subpart ZZZZ. Emission Point AA-004 meets the definition of a new affected source at an area source under NESHAP Subpart ZZZZ and must meet the requirements of this part by meeting the requirements of 40 CFR Part 60, Subpart IIII for compression ignition engines. No further requirements apply for such engines under NESHAP Subpart ZZZZ. [40 CFR 63.6585, 40 CFR 63.6590(c)]
T-2	For Emission Point AA-004, the permittee is subject to and shall comply with the applicable requirements of the New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines (CI ICE) (40 CFR Part 60, Subpart IIII) and shall comply with the General Provisions (40 CFR Part 60, Subpart A) as required in Table 8 to NSPS Subpart IIII. [40 CFR 60.4200(a)(2)(i)]

AREA0000000001 (AA-050) DADMAC Production Lines (P-1A through P-1J) (Lines P-1H through P-1J are proposed):

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		The permittee shall vent all emissions from the reactors (R-801 through R-804 and R-809 through R-814), except the initial nitrogen purge, to either thermal oxidizer TO-100 (AB-100) and then to scrubber S-TO100 (AC-100), or to thermal oxidizer TO-200 (AB-200) and then to scrubber S-TO200 (AC-200). Also, emissions from the organics vessels (V-804 and V-815) and the AOH/Water vessels (V-805 and V-812) shall be vented to either thermal oxidizer (TO-100 or TO-200). [APC-S-2 II.B.10]

Narrative Requirements:

Condition No.	Condition
T-1	AREA 1 includes the DADMAC Production Lines P-1A through P-1J. These lines consist of the following equipment: Monomer Reactors (R-801 through R-804, and R-809 through R-814), Slurry Tanks (V-801, V-802, V-809, V-810, V-813, and V-814), Centrifuges (C-801 through C-803, C-810, and C-813), Centrifuge Receivers (V-C801 through V-C803, V-C810, and V-C813), Monomer Vessels (V-803, V-811, V-814), Organics Vessel (V-804 and V-815), Liquid-Liquid Centrifuges (LS-803, LS-804, LS-810 and LS-813), AOH/Water Vessels (V-805 and V-812), Polymer Reactors (R-805 through R-808 and R-820 through R-835), Initiator Make-ups (V-R805 through V-R808 and V-R820 through V-R835), and Polymer Blend Vessels (V-806 through V-808, V-820 through V-823, and V-826 through V-835). [Other]

AREA0000000009 (AA-100) Polyamine Process Lines (P-2A, P-2B, P-2C, P-2D, P-2E, and P-2F): These lines include the following equipment: Reactors (R-901 through R-906) and Blend Vessels (V-901 through V-904) (Lines P-2D through P-2F are proposed.):

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		The permittee shall vent all emissions from the reactors (R-901 through R-906) except the initial nitrogen purge, to the scrubber, SC-901 (Emission Point AC-101). [APC-S-2 II.B.10]

AREA0000000013 (AA-401) Ethylenedichloride (EDC)-Ammonia Polyamine Process Line, including a Reactor (R-401), Receiver Vessel (V-401), Distillation Column (D-401), and Centrifuge (C-401):

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		The permittee shall vent all emissions from the reactor (R-401) and the distillation column (D-401), except the initial nitrogen purge, to either thermal oxidizer TO-100 (AB-100) and then to scrubber S-TO100 (AC-100), or to thermal oxidizer TO-200 (AB-200) and then to scrubber S-TO200 (AC-200). [APC-S-2 II.B.10]

EQPT0000000015 (AA-502) Miscellaneous Polymer Reactor (R-502) and Polymer Blend Vessel (V-502) for production of Alkylamine-Epichlorohydrin (A-E) polymer, Epiamines, Mannich polymer, p-(DMG-DETA)-Epi Polymer, and other miscellaneous polymers:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		The permittee shall vent all emissions from the reactor (R-502), except the initial nitrogen purge, to the scrubber, SC-502 (Emission Point AC-502). [APC-S-2 II.B.10]

AREA0000000011 (AA-510) Polymethyl Diallyl Amine (p-MDAA) Process Line, including a Monomer Reactor (R-510), Light Cut Distillate Receiver (V-510), Light Cut Distillation Column (D-510), and Polymer Reactor (R-511)
(Upon certification of construction):

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		The permittee shall vent all emissions from the reactor (R-510), the receiver (V-510), and the distillation column (D-510), except the initial nitrogen purge, to thermal oxidizer TO-100 (AB-100) and then to the scrubber S-TO100 (AC-100), or to thermal oxidizer TO-200 (AB-200) and then to the scrubber S-TO200 (AC-200). [APC-S-2 II.B.10]

AREA0000000012 (AA-520) p-(DMG-DETA)-Epi Prepolymer Process, including Monomer Reactor (R-520) and Light Cut Receiver Vessel (V-520) (Upon certification of construction):

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		The permittee shall vent all emissions from the reactor (R-520) and the distillate receiver (V-520), except the initial nitrogen purge, to thermal oxidizer TO-100 (AB-100) and then the scrubber S-TO100 (AC-100), or to thermal oxidizer TO-200 (AB-200) and then the scrubber S-TO200 (AC-200). [APC-S-2 II.B.10]

CONT0000000003 (AC-100) Packed Tower Scrubber (S-TO100) controlling emissions from the Thermal Oxidizer (Emission Point AB-100):

Limitation Requirements:

Condition No.	Parameter	Condition
L-1	Flow rate	Flow rate: For Emission Point AC-100, the permittee shall maintain a minimum scrubber water flow rate of 10 gallons per minute (gpm) in the packed tower section. [APC-S-2 II.B.10]

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1	Flow rate	Flow rate: For Emission Point AC-100, the permittee shall install a flow meter for continuously monitoring the scrubber water flow rate through the packed tower section. The flow meter shall be maintained per the manufacturer's specifications. [APC-S-2 II.B.11]

Record-Keeping Requirements:

Flow rate:

Condition No.	Condition
R-1	Flow rate: For Emission Point AC-100, the permittee shall record the water flow rate through the scrubber in gpm at least once per calendar day as measured by the flow meter. These records shall include the date and time that the flow was recorded and shall be maintained in written or electronic log form. Should no emissions be vented through the scrubber during a calendar day, the permittee shall note such in the log. [APC-S-2 II.B.11]

CONT0000000004 (AC-101) Venturi, Packed Tower Scrubber (SC-901) with mist eliminator, controlling emissions from the Polyamine Process:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1	Flow rate	Flow rate: For Emission Point AC-101, the permittee shall maintain a minimum scrubber water flow rate of 3.0 gallons per minute (gpm) in the packed tower section. [APC-S-2 II.B.10]

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1	Flow rate	Flow rate: For Emission Point AC-101, the permittee shall install a flow meter for continuously monitoring the scrubber water flow rate through the packed tower section. The flow meter shall be maintained per the manufacturer's specifications. [APC-S-2 II.B.11]

Record-Keeping Requirements:

Flow rate:

Condition No.	Condition
R-1	Flow rate: For Emission Point AC-101, the permittee shall record the water flow rate through the scrubber in gpm at least once per calendar day as measured by the flow meter. These records shall include the date and time that the flow was recorded and shall be maintained in written or electronic log form. Should no emissions be vented through the scrubber during a calendar day, the permittee shall note such in the log. [APC-S-2 II.B.11]

CONT0000000005 (AC-200) Venturi, Packed Tower Scrubber (S-TO200) with mist eliminator, controlling emissions from the Thermal Oxidizer (Emission Point AB-200)
(Upon certification of construction):

Limitation Requirements:

Condition No.	Parameter	Condition
L-1	Methanol	Methanol <= 20 lb/batch. [APC-S-2 II.B.10]
L-2	Methanol	Methanol <= 8.84 tons/yr (12-month rolling average). [APC-S-2 II.B.10]

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1	Methanol	Methanol: For Emission Point AC-200, within 180 days of commencing operation of the p-(DMG-DETA)Epi prepolymer and biennially thereafter, the permittee shall demonstrate compliance with the lb/batch emission limit for methanol by stack testing in accordance with EPA Test Method 308 (40 CFR Part 63, Appendix A). The stack test shall be performed for the entire length of time during which emissions from the production of a batch of p-(DMG-DETA)Epi are vented to Emission Point AB-200 thence Emission Point AC-200. [APC-S-2 II.B.11]
M-2		For Emission Point AC-200, upon initial startup of the p-(DMG-DETA)Epi prepolymer, the permittee shall install a pH meter and flow meter for continuously measuring the scrubbing liquid pH and flow rate through the packed tower section of the scrubber. The pH meter and flow meter shall be maintained per the manufacturer's specifications. [APC-S-2 II.B.11]

CONT0000000005 (AC-200) Venturi, Packed Tower Scrubber (S-TO200) with mist eliminator, controlling emissions from the Thermal Oxidizer (Emission Point AB-200)
(Upon certification of construction):

Record-Keeping Requirements:

Condition No.	Condition
R-1	For Emission Point AC-200, upon initial startup of the p-(DMG-DETA)Epi prepolymer, the permittee shall record the scrubbing liquid pH and water flow rate through the scrubber in gpm at least once per calendar day as measured by the meters. These records shall include the date and time that the pH and flow were recorded and shall be maintained in written or electronic log form. Should no emissions be vented through the scrubber during a calendar day, the permittee shall note such in the log. [APC-S-2 II.B.11]

Submittal/Action Requirements:

Condition No.	Condition
S-1	The permittee shall submit a stack test protocol at least thirty (30) days prior to the scheduled test date to ensure that all test methods and procedures are acceptable to the DEQ. The permittee shall also notify the DEQ ten (10) days prior to the scheduled test date so that an observer may be scheduled to witness the test. The stack test results shall be submitted within 60 days of the actual stack test. [APC-S-2 II.B.11]
S-2	For Emission Point AC-200, within 180 days of completion of the initial stack test for methanol, the permittee shall submit a monitoring plan establishing the minimum pH and flow rate of the scrubbing liquid through the packed tower section. These parameter values shall be based on the initial stack test and any additional monitoring. Upon approval of the monitoring plan, the DEQ may reopen the permit to establish limits for the above parameters. [APC-S-2 II.B.11]

EQPT0000000021 (AD-006) Hydrocholoric Acid Tank (T-6): 6,000-gallon fixed roof tank venting to a scrubber (AC-400):

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		For Emission Point AD-006, the permittee shall vent all emissions from the tank to the scrubber, HSV-30-PP (Emission Point AC-400). [APC-S-2 II.B.10]

EQPT0000000092 (AD-034) Hydrochloric Acid Tank (T-34): 10,000-gallon fixed roof tank venting to a scrubber (AC-500) (Upon certification of construction):

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		For Emission Point AD-034, the permittee shall vent all emissions from the tank to the scrubber, HSV-40-PP (Emission Point AC-500). [APC-S-2 II.B.10]

EQPT0000000077 (AD-830) Hazardous Waste Tank (T-830): 2,100-gallon fixed roof tank with emissions routed to either Thermal Oxidizer TO-100 (AB-100) or Thermal Oxidizer TO-200 (AB-200). The tank contains unreacted allyl chloride, salt, and reaction byproducts.:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		For Emission Point AD-830, the permittee shall vent all emissions from the tank to either thermal oxidizer TO-100 (AB-100) or thermal oxidizer TO-200 (AB-200). [APC-S-2 II.B.10]

EQPT0000000111 (AD-831) Hazardous Waste Tank (T-831): 6,000-gallon fixed roof tank with emissions routed to either Thermal Oxidizer TO-100 (AB-100) or Thermal Oxidizer TO-200 (AB-200). The tank contains unreacted allyl chloride, salt, and reaction byproducts.
(Upon certification of construction):

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		For Emission Point AD-831, the permittee shall vent all emissions from the tank to either thermal oxidizer TO-100 (AB-100) or thermal oxidizer TO-200 (AB-200). [APC-S-2 II.B(10)]

GRPT0000000001 (Boilers) Emission Points AA-001, AA-002, and AA-003 (Three Natural Gas-Fired Boilers):

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		For Emission Points AA-001, AA-002, and AA-003, the permittee shall only use natural gas as fuel. [APC-S-2 II.B.10]

Record-Keeping Requirements:

Fuel Combusted:

Condition No.	Condition
R-1	Fuel Combusted: For Emission Points AA-001, AA-002, and AA-003, the owner or operator shall maintain records of the amount of natural gas combusted during each calendar month. [40 CFR 60.48c(g)(2)]

Condition No.	Condition
R-2	All records required under 40 CFR 60.48c shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record. [40 CFR 60.48c(i)]

Narrative Requirements:

Condition No.	Condition
T-1	For Emission Points AA-001, AA-002, and AA-003, the permittee is subject to and shall comply with the applicable requirements of the New Source Performance Standards specified in 40 CFR Part 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units) and in 40 CFR Part 60, Subpart A (General Provisions). [40 CFR 60.40c(a)]

GRPT0000000003 (Pressurized Tanks) Pressurized Tanks:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1	Pressure	Pressure: For Emission Points AD-001, AD-002, AD-003, AD-004, AD-018, AD-019, AD-022, AD-030, AD-031, AD-032, and AD-033, the permittee shall maintain the design pressure of these tanks above 204.9 kPa (29.7 psia) and shall not allow venting under normal operation. [APC-S-2 II.B.10, 40 CFR 60.110b(d)(2)]

GRPT0000000004 (Tanks with Dedicated Vapor Balance) Tanks with Dedicated Vapor Balance:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		For Emission Points AD-001, AD-002, AD-003, AD-004, AD-011, AD-013, AD-022, AD-030, AD-031, AD-032, AD-033, AD-035, AD-036, and AD-037 the permittee shall equip these tanks with dedicated vapor balance service for tank loading operations. [APC-S-2 II.B.10]

GRPT0000000005 (Thermal Oxidizers) Thermal Oxidizers including AB-100 and AB-200:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1	Temperature (Deg. F)	Temperature (Deg. F): The permittee shall maintain a minimum combustion chamber temperature of 1,500 degrees F at all times when emissions may be vented to the thermal oxidizers. [APC-S-2 II.B.10]
L-2		The permittee shall vent all emissions from the thermal oxidizer, TO-100 (Emission Point AB-100), to the scrubber, S-TO100 (Emission Point AC-100), and from the thermal oxidizer, TO-200 (Emission Point AB-200), to the scrubber, S-TO200 (Emission Point AC-200). [APC-S-2 II.B.10]

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1	Temperature (Deg. F)	Temperature (Deg. F): For each thermal oxidizer, the permittee shall install a measuring device for continuously measuring the combustion chamber temperature at all times when emissions may be vented to the thermal oxidizer. The measuring device shall be maintained per the manufacturer's specifications. [APC-S-2 II.B.11]

Record-Keeping Requirements:

Temperature (Deg. F):

Condition No.	Condition
R-1	Temperature (Deg. F): For each thermal oxidizer, the permittee shall record the combustion chamber temperature in degrees F at least once per calendar day. These records shall include the date and time that the temperature was recorded and shall be maintained in written or electronic log form. Should no emissions be vented to the thermal oxidizer during a calendar day, the permittee shall note such in the log. [APC-S-2 II.B.11]

GRPT0000000006 (Scrubbers) Scrubbers including AC-100, AC-101, AC-200, AC-400, and AC-500:

Narrative Requirements:

Condition No.	Condition
T-1	By December 31, 2008, the permittee shall develop and implement a written maintenance plan for the scrubbers, including a thorough inspection of the scrubbers to be conducted every calendar year. The plan shall include procedures for evaluating the water distribution through the packed tower section, the condition of the packing, and the condition of any mist eliminators. A log of each inspection shall be maintained on site and shall indicate any problems noted (e.g., corrosion) and any maintenance actions taken (e.g., replacement of mist eliminator). [APC-S-2 II.B.11]

AI0000000083 (83) Water treatment polymers production facility:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1	Opacity	Opacity <= 40 %: No person shall cause, allow, or permit the discharge into the ambient air from any point source or emissions, any air contaminant of such opacity as to obscure an observer's view to a degree in excess of 40% opacity. This shall not apply to vision obscuration caused by uncombined water droplets. [APC-S-1 3.2]
L-2	Opacity	Opacity <= 40 %: (a) No person shall cause, permit, or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commerical or waste disposal process which exceeds forty (40) percent opacity subject to the exceptions provided in (b) and (c). (b) Startup operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup in any one hour and not to exceed three (3) startups per stack in any twenty-four (24) hour period. (c) Emissions resulting from soot blowing operations shall be permitted provided such emissions do not exceed 60 percent opacity, and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any one hour. [APC-S-1 3.1(a)-(c)]
L-3	Production rate	Production rate: The permittee shall be limited to the production rates listed below. DADMAC Monomer - 335 MM lb/yr Wet Strength Polymers - 140 MM lb/yr Polyamine - 300 MM lb/yr Mannich Polymer - 40 MM lb/yr Alkylamine-Epichlorohydrin Polymer - 0.5 MM lb/yr p-MDAA - 3.5 MM lb/yr p-(DMG-DETA)Epi - 5.0 MM lb/yr Melamine/Formaldehyde Colloid - 6.0 MM lb/yr Tanin-Based Products - 1.5 MM lb/yr Epiamines - 0.50 MM lb/yr EDC-Ammonia Polyamine - 8.0 MM lb/yr. [APC-S-2 II.B.10]

AI0000000083 (83) Water treatment polymers production facility:

Limitation Requirements:

Condition No.	Parameter	Condition
L-4		The permittee shall maintain on hand at all times sufficient equipment as is necessary to repair and/or overhaul the pollution control equipment. In the event of a failure of the pollution control equipment, the permittee shall cease operation of any equipment venting to the control equipment until such time as repairs are made and the proper efficiency of the pollution control equipment is restored. [APC-S-2 II.B.10]

Record-Keeping Requirements:

Production rate:

Condition No.	Condition
R-1	Production rate: The permittee shall maintain records of the monthly production rate of each polymer in lb/month and shall use these records to calculate the total in lbs/yr for each consecutive 12-month period. The permittee shall submit the total production rates calculated monthly for each product in accordance with Condition S-2. [APC-S-2 II.B.11]

Submittal/Action Requirements:

Condition No.	Condition
S-1	Except as otherwise specified herein, the permittee shall Submit a certified annual synthetic minor monitoring report: Due annually, by the 31st of January for preceding calendar year. This report shall address any required monitoring specified in the permit. [APC-S-2 II.B(11)]
S-2	For each proposed new emission source, the permittee must provide certification of construction prior to beginning operation of the new emission source. [APC-S-2 V.D.1]

AI0000000083 (83) Water treatment polymers production facility:

Submittal/Action Requirements:

Condition No.	Condition
S-3	General Condition: Except as otherwise specified herein, the permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective actions or preventive measures taken. Said report shall be made within five (5) working days of the time the deviation began. [11 Miss. Admin.Code Pt. 2, R.2.2.B(10).]
S-4	Except as otherwise specified herein, the permittee shall Submit a certified annual synthetic minor monitoring report: Due annually, by the 31st of January for preceding calendar year. This report shall address any required monitoring specified in the permit. [11 Miss. Admin.Code Pt. 2, R.2.2.B(11).]

Narrative Requirements:

Condition No.	Condition
T-1	For any emission point that has not been constructed, the requirements pertaining to that emission point herein are not applicable until such time that completion of construction has been certified by the permittee. [Other]
T-2	General Condition: Any activities not identified in the application are not authorized by this permit. [Miss. Code Ann. 49-17-29 1.b]
T-3	General Condition: The permittee shall at all times maintain in good working order and operate as efficiently as possible all air pollution control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit. [11 Miss. Admin. Code Pt. 2, R. 2.5.A.]
T-4	General Condition: Solids removed in the course of control of air emissions shall be disposed of in a manner such as to prevent the solids from becoming windborne and to prevent the materials from entering state waters without the proper environmental permits. [Miss. Code Ann. 49-17-29 1.a(i and ii)]
T-5	General Condition: Any diversion from or bypass of collection and control facilities is prohibited except as provided for in 11 Miss. Admin. Code Pt.2, R. 1.10, "Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants", [11 Miss. Admin.Code Pt. 2, R.1.10.]
T-6	General Condition: Should the Executive Director of the Mississippi Department of Environmental Quality declare an Air Pollution Emergency Episode, the permittee will be required to operate in accordance with the permittee's previously approved Emissions Reduction Schedule. [11 Miss. Admin.Code Pt. 2, R.2.10.]

AI0000000083 (83) Water treatment polymers production facility:

Narrative Requirements:

Condition No.	Condition
T-7	General Condition: The permittee shall allow the Mississippi Department of Environmental Quality Office of Pollution Control and the Mississippi Environmental Quality Permit Board and/or their authorized representatives, upon the presentation of credentials: (a) To enter upon the permittee's premises where an air emission source is located or in which any records are required to be kept under the terms and conditions of this permit, and (b) At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any air emission. [Miss. Code Ann. 49-17-21]
T-8	General Condition: After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to: (a) Violation of any terms or conditions of this permit (b) Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or (c) A change in any condition that required either a temporary or permanent reduction or elimination of authorized air emissions. [11 Miss. Admin.Code Pt. 2, R. 2.2.C.]
T-9	General Condition: This permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. Sufficient cause for this permit to be reopened shall exist when an air emissions stationary source becomes subject to Title V. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of the permit. [11 Miss. Admin.Code Pt. 2, R.2.2.B(15)(b).]
T-10	General Condition: Except for data determined to be confidential under the Mississippi Air & Water Pollution Control Law, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Mississippi Department of Environmental Quality Office of Pollution Control. [Miss. Code Ann. 49-17-39]
T-11	General Condition: The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations. [11 Miss. Admin.Code Pt. 2, R. 2.2.B(15)(c).]
T-12	General Condition: Nothing herein contained shall be construed as releasing the permittee from any liability for damage to persons or property by reason of the installation, maintenance, or operation of the air cleaning facility, or from compliance with the applicable statutes of the State, or with local laws, regulations, or ordinances. [11 Miss. Admin.Code Pt. 2, R. 2.2.B(7).]

AI0000000083 (83) Water treatment polymers production facility:

Narrative Requirements:

Condition No.	Condition
T-13	General Condition: This permit may only be transferred upon approval of the Mississippi Environmental Quality Permit Board. [11 Miss. Admin. Code Pt. 2, R. 2.16.B.]
T-14	General Condition: This permit is for air pollution control purposes only. [11 Miss. Admin.Code Pt. 2, R. 2.1.D(1).]
T-15	General Condition: This permit is a Federally-approved permit to operate a synthetic minor source as described in 11 Miss. Admin. Code Pt. 2, R. 2.4.D [11 Miss. Admin.Code Pt. 2, R. 2.4.D.]
T-16	General Condition: The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby. [11 Miss. Admin.Code Pt. 2, R. 2.1.D(7).]
T-17	General Condition: The permittee shall furnish to MDEQ within a reasonable time any information MDEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to MDEQ copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee shall furnish such records to MDEQ along with a claim of confidentiality. [11 Miss. Admin.Code Pt. 2, R. 2.2.B(15)(d).]

AI0000000083 (83) Water treatment polymers production facility:

Narrative Requirements:

Condition No.	Condition
T-18	General Condition: This permit does not authorize a modification as defined in 11 Miss. Admin. Code Pt. 2, Ch. 2 "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment". Modification is defined as "Any physical change in or change in the method of operation of a facility which increases actual emissions or potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under the Federal Act into the atmosphere not previously emitted. A physical change or change in the method of operation shall not include: (a) routine maintenance, repair, and replacement; (b) use of an alternative fuel or raw material by reason of an order under Sections 2(a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act; (c) use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act; (d) use of an alternative fuel or raw material by a stationary source which: (i) the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166; or (ii) the source is approved to use under any permit issued under 40 CFR 52.51 or under regulations approved pursuant to 40 CFR 51.166; (e) an increase in the hours of operation or in the production rate unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.51, or under regulations approved pursuant to Subpart I or 40 CFR 51.166; or (f) any change in ownership of the stationary source" [11 Miss. Admin.Code Pt. 2, R. 2.1.D(2).]
T-19	General Condition: It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit unless halting or reducing activity would create an imminent and substantial endangerment threatening the public health and safety of the lives and property of the people of this state. [11 Miss. Admin.Code Pt. 2, R.2.2.B(15)(a).]
T-20	General Condition: The permittee shall retain all required records, monitoring data, supported information and reports for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-chart recordings or other data for continuous monitoring instrumentation, and copies of all reports required by this permit. Copies of such records shall be submitted to MDEQ as required by Applicable Rules and Regulations or this permit upon request. [11 Miss. Admin.Code Pt. 2, R.2.9.]
T-21	General Condition: The knowing submittal of a permit application with false information may serve as the basis for the Permit Board to void the permit issued pursuant thereto or subject the applicant to penalties for constructing or operating without a valid permit. [11 Miss. Admin.Code Pt. 2, R.2.2.B(5).]

AI0000000083 (83) Water treatment polymers production facility:

Narrative Requirements:

Condition No.	Condition
T-22	General Condition: Emergencies (a) Except as otherwise specified herein, an emergency means any situation arising from sudden and reasonably unforseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. (b) An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in (c) following are met. (c) The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs, or other relevant evidence as follows: (i) an emergency occurred and that the permittee can identify the cause(s) of the emergency; (ii) the permitted facility was at the time being properly operated; (iii) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and (iv) the permittee submitted notice of the emergency to MDEQ within two (2) working days of the time when emission limitations were exceeded due to the emergency which contained a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. (d) In any enforcement proceeding, the permittee seeking to establish the occurrence of any emergency has the burden of proof. (e) This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein [11 Miss. Admin.Code Pt. 2, R.2.2.B(10).]
T-23	General Condition: Upsets (a) The occurrence of an upset constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards or other requirements of Applicable Rules and Regulations or any applicable permit if the permittee demonstrates through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows: (i) an upset occurred and that the permittee can identify the cause(s) of the upset; (ii) the source was at the time being properly operated; (iii) during the upset the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit; (iv) the permittee submitted notice of the upset to the DEQ within five (5) working days of the time the upset began which contained a description of the upset, any steps taken to mitigate emissions, and corrective actions taken. (b) In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof. (c) This provision is in addition to any upset provision contained in any applicable requirement. [11 Miss. Admin.Code Pt. 2, R.1.10.]

AI0000000083 (83) Water treatment polymers production facility:

Narrative Requirements:

Condition No.	Condition
T-24	General Condition: Startups and Shutdowns (a) Startups and shutdowns are part of normal source operation. Emissions limitations applicable to normal operation apply during startups and shutdowns except as follows: (i) when sudden, unavoidable breakdowns occur during a startup or shutdown, the event may be classified as an upset subject to the requirements above; (ii) when a startup or shutdown is infrequent, the duration of excess emissions is brief in each event, and the design of the source is such that the period of excess emissions cannot be avoided without causing damage to equipment or persons; or (iii) when the emissions standards applicable during a startup or shutdown are defined by other requirements of Applicable Rules and Regulations or any applicable permit. (b) In any enforcement proceeding, the permittee seeking to establish the applicability of any exception during a startup or shutdown has the burden of proof. (c) In the event this startup and shutdown provision conflicts with another applicable requirement, the more stringent requirement shall apply. [11 Miss. Admin.Code Pt. 2, R.1.10.]
T-25	General Condition: Maintenance (a) Maintenance should be performed during planned shutdown or repair of process equipment such that excess emissions are avoided. Unavoidable maintenance that results in brief periods of excess emissions and that is necessary to prevent or minimize emergency conditions or equipment malfunctions constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards, or other regulatory requirements if the permittee can demonstrate the following: (i) the permittee can identify the need for the maintenance; (ii) the source was at the time being properly operated; (iii) during the maintenance the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit; (iv) the permittee submitted notice of the maintenance to MDEQ within five (5) working days of the time the maintenance began or such other times as allowed by MDEQ, which contained a description of the maintenance, any steps taken to mitigate emissions, and corrective actions taken. (b) In any enforcement proceeding, the permittee seeking to establish the applicability of this section has the burden of proof. (c) In the event this maintenance provision conflicts with another applicable requirement, the more stringent requirement shall apply. [11 Miss. Admin.Code Pt. 2, R.1.10.]
T-26	General Condition: For renewal of this permit the applicant shall make application not less than one-hundred eighty (180) days prior to the expiration date of the permit substantiated with current emissions data, test results or reports or other data as deemed necessary by the Mississippi Environmental Quality Permit Board. [11 Miss. Admin.Code Pt. 2, R.2.8.]

GENERAL INFORMATION

Polychemie Inc
Port Bienville Industrial Park, Road D
Pearlington, MS
Hancock County

Alternate/Historic Identifiers

ID	Alternate/Historic Name	User Group	Start Date	End Date
83	Polychemie, Inc.	Official Site Name	03/06/1998	
2804500042	Polychemie Inc	Air-AIRS AFS	10/12/2000	
MSR000005033	Polychemie, Inc.	Hazardous Waste-EPA ID	10/12/2000	
100000042	Polychemie, Inc.	Air-Construction	06/19/1998	
100000042	Polychemie, Inc.	Air-Synthetic Minor Operating	06/19/1998	12/31/2004
MSR101051	Polychemie, Inc.	GP-Construction	03/06/1998	03/27/2005
MSR110156	Polychemie, Inc.	GP-Sara Title III	08/17/1998	01/29/2001
MS0054127	Polychemie, Inc.	Water - NPDES	06/19/1998	06/16/2003
MSR110156	Polychemie, Inc.	GP-Baseline	01/29/2001	01/25/2006
100000042	Polychemie, Inc.	Air-Synthetic Minor Operating	07/17/2003	06/30/2008
MS0054127	Polychemie, Inc.	Water - NPDES	08/25/2003	07/31/2008
MSR110156	Polychemie, Inc.	GP-Baseline	01/25/2006	01/26/2011
MS0054127	Polychemie Inc	Water - NPDES	09/04/2008	08/06/2013
100000042	Polychemie Inc	Air-Synthetic Minor Operating	09/04/2008	08/06/2013
WQC1998006	Polychemie Inc	WQC Number	01/20/1998	
MSC970015740	Polychemie Inc	COE Public Notice/ Permit Number	01/20/1998	02/09/1998
MSR110156	Polychemie, Inc.	GP-Baseline	01/26/2011	08/31/2011
100000042	Polychemie Inc	Air-Synthetic Minor Operating	08/06/2013	07/31/2018
MS0054127	Polychemie Inc	Water - NPDES	08/06/2013	07/31/2018

Basin: Pearl River Basin

GENERAL INFORMATION

Location Description: The discharge is pumped off site to the port authority then to the Pearl River. PG- Plant Entrance (General). Data collected by Diane Gledhill on 11/14/2005. Elevation 6.5 feet. *Accuracy 44.9'. Latitude North 30 13' 58.9" Longitude West 89 33' 17.7".