ADEQ OPERATING AIR PERMIT

Pursuant to the Regulations of the Arkansas Operating Air Permit Program, Regulation 26:

Permit No.: 1009-AOP-R2

IS ISSUED TO:
Teris, L.L.C.
309 American Road
El Dorado, AR 71730
Union County
AFIN: 70-00098

THIS PERMIT AUTHORIZES THE ABOVE REFERENCED PERMITTEE TO INSTALL, OPERATE, AND MAINTAIN THE EQUIPMENT AND EMISSION UNITS DESCRIBED IN THE PERMIT APPLICATION AND ON THE FOLLOWING PAGES. THIS PERMIT IS VALID BETWEEN:

	May 1, 2002	AND	April 30, 2007
THE PERMIT HEREIN.	TEE IS SUBJECT T	O ALL LIMITS AND	CONDITIONS CONTAINED
Signed:			
Michael Bonds Chief, Air Divi			Date Modified

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List of Acronyms and Abbreviations

A.C.A. Arkansas Code Annotated

AFIN ADEQ Facility Identification Number

CFR Code of Federal Regulations

CO Carbon Monoxide

HAP Hazardous Air Pollutant

lb/hr Pound Per Hour

MVAC Motor Vehicle Air Conditioner

No. Number

NO_x Nitrogen Oxide

PM Particulate Matter

PM10 Particulate Matter Smaller Than Ten Microns

SNAP Significant New Alternatives Program (SNAP)

SO₂ Sulfur Dioxide

SSM Startup, Shutdown, and Malfunction Plan

Tpy Tons Per Year

UTM Universal Transverse Mercator

VOC Volatile Organic Compound

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SECTION I: FACILITY INFORMATION

PERMITTEE: Teris, L.L.C.

AFIN: 70-00098

PERMIT NUMBER: 1009-AOP-R2

FACILITY ADDRESS: 309 American Road

El Dorado, AR 71730

MAILING ADDRESS 309 American Road

El Dorado, AR 71730

COUNTY: Union

CONTACT POSITION: Mohamed Abdulhafid, Director of Compliance

TELEPHONE NUMBER: (870) 864-3626

REVIEWING ENGINEER: Michael H. Watt

UTM North South (Y): Zone 15: 3673.9 km

UTM East West (X): Zone 15: 534.5 km

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SECTION II: INTRODUCTION

Summary of Permit Activity

Teris operates a hazardous waste treatment and storage facility located in El Dorado. The primary treatment process consists of incineration, and some recycling activities.

This minor modification application is to allow for installation of an Aerosol Processing Machine (APM), a Solvent Recovery Process (with package units) (SRP), a Refrigerant Reclaim Process, and a Refrigerant Reclaim Process Boiler.

The APM (SN-27) will be used to recover metals for recycling from aerosol cans and paint cans. The off-gasses of the APM will be normally routed to the existing Secondary Combustion Chamber to destroy any combustibles. Under special operation conditions where paint cans are being crushed and off-gas flows are minuscule, the off-gasses are routed through an Activated Carbon Unit included with the APM. VOC emissions will be 0.2 tons per year.

The SRP (SN-28) is a distillation process which will be used to reclaim halogenated type solvents. The non-condensable off-gasses of the SRP will be routed to the existing Secondary Combustion Chamber to destroy any combustibles. When gases cannot be routed to the SCC, the condenser overhead gases will be routed to an Activated Carbon Unit included with the SRP. Emissions for this Unit will be 0.21 tons per year of Non-VOC Refrigerant and 0.21 tons per year of Methylene Chloride (which is a HAP, but not a VOC).

The Refrigerant Reclaim Process (SN-29) and a Refrigerant Reclaim Process Boiler (SN-30) will be limited to non-VOC and non-HAP refrigerants, but will be subject to 40 CFR 82, Subpart F. The permit will include VOC and HAP emissions to account for trace contaminants in the refrigerants.

Process Description

Fixed Incinerator Unit and MWP-2000

Teris receives wastes to be incinerated in gaseous, liquid, and solid forms. In the Fixed Incinerator Unit (SN-01), solid and pumpable wastes are fed into either of two rotary kilns, while liquid and gaseous wastes are fed directly into the thermal oxidation unit (TOU). The rotary kilns are fed via shredder/auger machines (SAMs) by injection nozzle, or by a drop chute. The SAMs are purged with nitrogen to prevent the possibility of fire in the SAMs. The SAMs are then vented directly to the kilns. Natural gas and/or waste derived fuels excluded as hazardous waste under RCRA may be used as an additional fuel.

In addition to the fixed incinerator unit, Teris also has a smaller incinerator, known as the MWP-2000 (SN-02). This unit has a smaller rotary kiln, TOU, quench, and scrubber, and functions in the same manner as the fixed unit. The MWP-2000 rotary kiln is also fed via a SAM.

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Wastes placed in the rotary kilns are incinerated, with the ash generated from incinerated solids being removed from the low end of the kiln. Gases generated by the incineration process are routed to the TOU.

In the TOU, hot gases from the kilns combine with gases produced by the incineration of liquids and gases. Exiting the TOU, gases are routed by ductwork to a quench and a liquid scrubber. These cool the gases and also remove hydrochloric acid produced in the incineration process. From the scrubber, the cooled gases are routed through demisters to the incinerator stack.

As a precaution to thermal damage of scrubbing chambers and duct work due to unexpected loss of scrubbing solution, it is necessary to have emergency vents known as divert stacks. These stacks are normally closed, and the gases do not normally exit from them to the atmosphere. However, during times of excessive thermal build up in the scrubber (for purposes of this permit to be known as an operational divert stack event), it may be necessary for safety purposes to bypass the normal gas routing, and vent the gases to the atmosphere through the divert stacks. During such events, waste feed is ceased automatically while temperature is maintained to destroy residual organics.

For routine maintenance operations, it is sometimes necessary to route gases to the atmosphere using the divert stacks (for purposes of this permit to be known as a maintenance divert stack event). No waste is fed during these maintenance operations. Procedures for operating the facility during these events are outlined by Plantwide Conditions #16 through #24.

Organic Liquid Storage Tanks

Waste organic liquids received at the facility are generally stored in above ground tanks. All tanks have fixed roofs with vents that are connected to carbon canisters. Tank emissions are accounted for in SN-21.

On-Site Boilers

In order to generate a pressure differential, Teris uses steam produced in on-site boilers to produce a venturi jet downstream of the scrubber. This produces a pressure differential to produce a "draft" through the system.

Teris uses three package boilers (SN-04 through SN-06) which can be fired with natural gas or with waste derived fuels, and one waste-fired boiler (SN-08) to produce steam in the system. Only the three package boilers normally vent emissions directly to the atmosphere. The waste-fired boiler exhaust is normally vented into the fixed incinerator scrubbing system, but can vent to the atmosphere when following specific procedures.

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Ground Water Recovery System

The site Teris currently operates was previously the site of an oil refinery from 1920 to 1970. Various past refinery operations at this site have contributed to ground water contamination. To recover and clean the contaminated ground water, Teris operates a ground water recovery system (SN-23) as part of a corrective action program. Recovered ground water, which is high in chlorides, is removed as part of the cleanup process and is routed by piping to the quench and scrubber at the fixed incinerator unit. Ground water recovered by the system which is low in chlorides is routed to the Low Chloride Water Treatment facility.

The recovered ground water is treated with lime to adjust the pH prior to polymer addition. After the flocculation process, suspended solids are removed by a filter press. The water is then pH adjusted and routed to an air stripper. The stripper is designated as SN-03, and the HCl storage tank utilized for adjusting the pH of the water is designated as SN-13.

A lime storage silo is used at the wastewater treatment facility. A baghouse controls particulate emissions from this silo (SN-17).

Other forms of remediation, such as soil vapor extraction and/or bio-treatment, may be utilized in the future. Also, it is anticipated that as many as three additional recovery wells will be installed in the future. Those anticipated volumes are accounted for in SN-03.

Ash Treatment Process and Ferrous Metals Recovery Process

Ash generated by the two rotary kilns in the fixed incinerator unit and the ash generated by the kiln in the MWP-2000 is transported to an on-site ash treatment area. This area is enclosed and the particulate generated by the process is controlled by a baghouse. Ash is received in a section of the process that was previously used to store solidification agents. For this reason, a silo has been added to store the solidification agents (SN-18). The silo is sited just outside the solidification building and is loaded pneumatically by truck. Particulate emissions from this source are controlled by a small baghouse located on the silo.

The Residue Treatment Facility (RTF) process takes kiln ash and other incinerator residues. The ash "wastes" are conveyed to the "Trommel" screen. The Trommel screen is a rotating drum which retains metal fragments and ash clumps larger than 0.75 inches in size. Wastes smaller than this size are passed through the screen. The retained material is separated into ferrous/non-ferrous material by use of an electromagnet.

The slurry which passes through the screen is routed to a mechanical ash dewatering system. This system has a vibrating scalping screen which removes additional water. The dewatering system has a gravity drainage section followed by a forced draft drainage system. Exhaust from the forcing fan is routed to the existing ash handling system where it is controlled by the existing baghouse (SN-07). Dewatered ash is routed to a hopper for off-loading into trucks and/or sludge boxes.

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Partially dewatered slurry routes to an ash screen tank and is then pumped to an ash/water hydroclone. The hydroclone is a closed system with no atmospheric discharge. From the hydroclone, the slurry is routed to a second dewatering system. This system is identical to the one above. The dewatered ash is then routed to a hopper for off-loading into trucks and/or sludge boxes. The off-loading is accomplished inside the RTF building.

Brine Unit

Wastes containing chlorinated hydrocarbon compounds which are incinerated at this facility are broken into carbon dioxide (CO₂), water vapor, and acid gases such as hydrochloric acid (HCl). The incinerator air pollution control equipment removes the majority of the HCl. This process results in the production of calcium chloride (CaCl₂) in a liquid form referred to as "scrubber brine." The calcium chloride and entrained particulates are recirculated in the control system until a predetermined specific gravity is achieved.

A portion of this solution is routed to the Brine Unit for recovery of a calcium chloride brine solution which is used for oil well completion fluid, as well as other products. Lime and NaSH, Na₂S, or similar sulfide compounds are used to treat the scrubber brine used to produce this product. The lime adjusts the pH range of the liquid to a point where the NaSH can react with any metals that may be in the scrubber brine. The resulting insoluble metal sulfides are removed by filtration. A small amount of hydrogen sulfide (H₂S) may be produced in this process. The hydrogen sulfide is removed by a wet scrubber (SN-16) located on the batch tank vent. Other process equipment at the Brine Plant is SN-14, SN-15, and SN-22.

Stationary Internal Combustion Sources

Teris maintains three emergency generators and a firewater pump. Each are diesel-fueled internal combustion engines. They are addressed in SN-24.

Miscellaneous Sources

In addition to the above listed sources, Teris has several other emission points. These are three HCl storage tanks which contain varying concentrations of HCl used to wash the TOU demister pads in order to maintain demister efficiency: an 8,800 gallon storage tank (32 percent HCl), a 300 gallon "day" storage tank (32 percent HCl), and an 1,800 gallon dilution tank (2 percent HCL). Emissions from these tanks are controlled by a scrubber (SN-10).

Teris has two above ground tanks which contain unleaded gasoline and diesel fuel (SN-11 and SN-12) and one 500 gallon waste oil storage tank (SN-19), which stores lubricating oils generated during servicing and repair of vehicles.

Lime is received in bulk shipment by tank truck for use in the incinerator scrubber systems. The tank truck is connected to the lime batch tank header assembly where the lime is mixed with water. The only time there are emissions is during the off leading of the lime into the batch tank.

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Emissions from the loading operation are controlled by baghouses (SN-09 and SN-20). From the lime batch tank, the lime slurry is pumped to day tank 552 from which the lime is fed to the scrubber.

The facility also operates a Refrigerant Reclaim Process (SN-29) and a Refrigerant Reclaim Process Boiler (SN-30).

Other miscellaneous sources identified are: drum sampling; waste repackaging; fugitive emissions from pumps, flanges and valves; tanker and railcar cleaning; railcar unloading; tanker loading and unloading; roll-off loading and unloading; vacuum truck loading; equipment and truck wash/decontamination; barrel crushing; empty drum storage; and fugitive dust from unpaved roads. These are addressed in SN-25.

Regulations

The following table contains the regulations applicable to this permit.

Arkansas Air Pollution Control Code, Regulation 18, effective February 15, 1999

Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective February 15, 1999

Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective September 26, 2002

40 CFR 60 Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

40 CFR 60 Subpart Ka - National Emission Standards for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After May 19, 1978, and Prior to July 23, 1984

40 CFR 60 Subpart Kb - National Emission Standards for Volatile Organic Liquids Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced After July 23, 1984

40 CFR 61 Subpart C - National Emission Standard for Beryllium, 40 CFR 61 Subpart E - National Emission Standard for Mercury

40 CFR 61 Subpart FF - National Emission Standard for Benzene Waste Operations

40 CFR 63 Subpart EEE - National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors

40 CFR 82, Subpart F – Protection of Stratospheric Ozone, Subpart F, Recycling and Emissions Reduction

RCRA Subpart AA, BB, and CC

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The following table is a summary of emissions from the facility. This table, in itself, is not an enforceable condition of the permit.

Emission Summary

	EMISSION SUMMARY				
Source	Description	Pollutant	Emission Rates		
Number		1 Onutant	lb/hr	tpy	
		PM	147.1	174.2	
		PM_{10}	147.1	174.2	
Total	Allowable Emissions	SO_2	644.7	78.9	
		VOC	70.3	52.6	
		CO	265.3	152.3	
		NO_X	193.9	409.9	
	HAPs*	Acetaldehyde	3.60	15.76	
		Acetamide	0.58	2.49	
		Acetonitrile	0.85	3.71	
		Acetophenone	0.59	2.54	
		2-Acetylaminoflourene	0.58	2.49	
		Acrolein	0.69	3.03	
		Acrylamide	0.57	2.48	
		Acrylic acid	0.61	2.66	
		Acrylonitrile	1.01	4.44	
		Allyl chloride	2.19	9.61	
		4-Aminobiphenyl	0.58	2.49	
		Aniline	0.58	2.53	
		o-Anisidine	0.58	2.49	
		Antimony Compounds	0.15	0.62	
		Arsenic	0.41	1.77	
		Arsenic Compounds	0.98	4.28	
		Benzene (including	1.77	7.77	
		benzene from gasoline)			
		Benzidine	0.14	0.62	
		Benzotrichloride	0.48	2.10	
		Benzyl chloride	0.59	2.56	
		Beryllium	7.20E-04	3.00E-03	
		Beryllium Compounds	6.38E-03	0.03	
		Biphenyl	0.58	2.49	
		Bis(2-chloroethyl) ether	0.70	3.05	
		Bis(2-ethylhexyl)phthalate	0.58	2.49	
		(DEHP)			
		[Di-sec-octyl phthalate]			

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EMISSION SUMMARY				
Source	Description	Pollutant -	Emission Rates	
Number	Description	Tonutunt	lb/hr	tpy
·		Bis(chloromethyl) ether	0.48	2.08
		Bromoform	0.71	3.11
		1,3-Butadiene	2.95	12.93
		Cadmium	0.28	1.21
		Cadmium Compounds	0.45	1.97
		Calcium cyanamide	0.39	1.66
		Caprolactam (Dust)	0.58	2.49
		Caprolactam (Vapor)	0.58	2.49
		Captan	0.58	2.49
		Carbaryl	0.58	2.49
		Carbon disulfide	2.89	12.65
		Carbon tetrachloride	1.98	8.68
		Carbonyl sulfide	0.58	2.49
		Catechol	0.58	2.49
		Chloramben	0.58	2.49
		Chlordane	0.58	2.49
		Chlorine	3.96	17.32
		Chloroacetic acid	0.57	2.47
		2-Chloroacetophenone	0.58	2.49
		Chlorobenzene	0.68	2.95
		Chlorobenzilate	0.58	2.49
		Chloroform	2.61	11.44
		Chloromethyl methyl ether	0.58	2.49
		Chloroprene	2.11	9.27
		Chromium	1.42	6.25
		Chromium Compounds	4.33	19.01
		Cobalt Compounds	0.66	2.86
		Cresols/Cresylic acid	0.58	2.49
		(mixed isomers)		
		o-Cresol	0.58	2.50
		m-Cresol	0.58	2.49
		p-Cresol	0.58	2.49
		Cumene	0.64	2.78
		Cyanide Compounds	0.56	2.43
		2,4-D (2,4-	0.58	2.49
		Dichlorophenoxyacetic		
		Acid)		
		(including salts and esters)		

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Source	Description	Pollutant	Emission Rates	
Number		Pollutant	lb/hr	tpy
<u> </u>		DDE (1,1-dichloro-2,2-	0.58	2.49
		bis(p-chlorophenyl)		
		ethylene)		
		Diazomethane	0.58	2.49
		Dibenzofuran	0.58	2.49
		1,2-Dibromo-3-	0.48	2.09
		chloropropane		
		Dibutyl phthalate	0.58	2.49
		1,4-Dichlorobenzene	0.59	2.57
		3,3'-Dichlorobenzidene	0.58	2.49
		Dichloroethyl ether	0.58	2.49
		(Bis[2-chloroethyl]ether)		
		1,3-Dichloropropene	0.58	2.49
		Dichlorvos	0.58	2.49
		Diethanolamine	0.58	2.49
		N,N-Dimethylaniline	0.58	2.49
		Diethyl sulfate	0.74	3.24
		3,3'-Dimethoxybenzidine	0.56	2.50
		4-Dimethylaminoazo	0.57	2.46
		benzene		
		3,3'-Dimethylbenzidine	0.50	2.14
		[o-Tolidine]		
		Dimethylcarbamoyl	0.58	2.49
		chloride		
		N,N-Dimethylformamide	0.60	2.62
		1,1-Dimethylhydrazine	0.58	2.49
		Dimethyl phthalate	0.58	2.49
		Dimethyl sulfate	0.58	2.49
		4,6-Dinitro-o-cresol	0.58	2.49
		(including salts)		
		2,4-Dinitrophenol	0.59	2.58
		2,4-Dinitrotoluene	0.59	2.57
		1,4-Dioxane (1,4-	0.80	3.51
		Diethyleneoxide)		
		1,2-Diphenylhydrazine	0.59	2.58
		Epichlorohydrin (1-Chloro-	0.67	2.94
		2,3-epoxypropane)		
		1,2-Epoxybutane	0.75	3.29
		Ethyl acrylate	0.90	3.94
		Ethylbenzene	0.68	2.96

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	EMISSION SUMMARY				
Source	Description	Pollutant	Emission Rates		
Number	Description	Tonutant	lb/hr	tpy	
		Ethyl carbamate (Urethane)	0.58	2.49	
		Ethyl chloride	3.59	15.74	
		(Chloroethane)			
		Ethylene dibromide	0.59	2.56	
		(Dibromoethane)			
		Ethylene dichloride (1,2-	2.71	11.89	
		Dichloroethane)			
		Ethylene glycol	0.58	2.49	
		Ethyleneimine (Aziridine)	0.58	2.49	
		Ethylene oxide	0.58	2.49	
		Ethylene thiourea	0.58	2.49	
		Ethylidene dichloride (1,1-	2.41	10.56	
		Dichloroethane)	0.64	2.55	
		Formaldehyde	0.64	2.77	
		Glycol Ethers	0.62	2.72	
		Heptachlor	0.58	2.49	
		Hexachlorobenzene	0.57	2.47	
		Hexachlorobutadine	0.58	2.49	
		Hexachlorocyclopentadiene	0.58	2.49	
		Hexachloroethane	0.59	2.54	
		Hexamethylene	0.58	2.49	
		diisocyanate	0.40	2.00	
		Hexamethylphosphoramide	0.48	2.09	
		Hexane	1.62	7.12	
		Hydrazine	0.58	2.49	
		Hydrochloric acid*	41.60	174.75	
		(Hydrogen Chloride [gas			
		only]) Hydrogen fluoride	7.90	34.57	
		(Hydrofluoric acid)	1.30	34.37	
		Hydroquinone	0.58	2.49	
		Isophorone	0.58	2.49	
		Lindane (1,2,3,4,5,6-	0.58	2.30	
		Hexachlorocyclyhexane	0.50	∠. ↑ ೨	
		[all stero isomers])			
		Lead	7.02	30.73	
		Lead Compounds	12.60	55.32	
		Maleic anhydride	0.58	2.50	
		Manganese Compounds	11.00	48.18	
		Mercury	0.50	2.20	

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EMISSION SUMMARY				
Source	Description	Pollutant	Emission Rates	
Number	Description	Foliutalit	lb/hr	tpy
		Mercury Compounds	0.68	2.97
		Methanol	1.02	4.46
		Methoxychlor	0.58	2.49
		Methyl bromide	3.60	15.76
		(Bromomethane)		
		Methyl chloride	3.60	15.76
		(Chloromethane)		
		Methyl chloroform (1,1,1-	1.98	8.70
		Trichloroethane)		
		Methyl ethyl ketone (2-	0.96	4.21
		Butanone)		
		Methylhydrazine	0.57	2.46
		Methyl iodide	0.58	2.49
		(Iodomethane)		
		Methyl isobutyl ketone	0.84	3.66
		(Hexone)		
		Methyl isocyanate	0.58	2.49
		Methyl methacrylate	1.02	4.45
		Methyl tert-butyl ether	2.58	11.31
		4,4'-Methylenebis(2-	0.58	2.49
		chloroaniline)		
		Methylene chloride*	3.77	16.00
		(Dichloromethane)		
		4,4'-Methylenediphenyl	0.58	2.49
		diisocyanate (MDI)		
		4,4'-Methylenedianiline	0.58	2.49
		Naphthalene	0.62	2.67
		Nickel Compounds	29.90	52.17
		Nitrobenzene	0.58	2.50
		4-Nitrobiphenyl	0.58	2.49
		[4-Nitrodiphenyl]		
		4-Nitrophenol	0.58	2.49
		4-Nitropropane	0.67	2.92
		N-Nitroso-N-methylurea	0.16	0.68
		N-Nitrosodimethylamine	0.14	0.62
		N-Nitrosomorpholine	0.58	2.49
		Parathion	0.58	2.49
		Pentachloronitrobenzene	0.58	2.49
		(Quintobenzene)		
		Pentachlorophenol	0.58	2.49

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	EMISSION SUMMARY				
Source	Description	Pollutant	Emission Rates		
Number	or Description		lb/hr	tpy	
		Phenol	0.58	2.49	
		p-Phenylenediamine	0.58	2.49	
		Phosgene	0.58	2.49	
		Phosphine	0.58	2.49	
		Phosphorus	0.58	2.49	
		Phthalic anhydride	0.58	2.49	
		Polychlorinated biphenyls (Aroclors)	0.02	0.06	
		Polycyclic Organic Matter	0.21	0.91	
		1,3-Propane sultone	0.58	2.49	
		beta-Propiolactone	0.58	2.49	
		Propionaldehyde	0.58	2.49	
		Propoxur (Baygon)	0.58	2.49	
		Propylene dichloride (1,2- Dichloropropane)	1.07	4.71	
		Propylene oxide	3.47	15.22	
		1,2-Propylenimine (2-	0.58	2.49	
		Methylaziridine)	0.56	2.4)	
		[Propylene imine]	0.50	2.40	
		Quinoline	0.58	2.49	
		Quinone (p-Benzoquinone)	0.58	2.49	
		Selenium Compounds	6.98	30.57	
		Styrene	0.69	3.00	
		Styrene oxide	0.58 0.02	2.49 0.06	
		2,3,7,8- Tetrachlorodibenzo-p-	0.02	0.00	
		dioxin			
		1,1,2,2-Tetrachloroethane	0.58	2.49	
		Tetrachloroethylene*	0.80	3.48	
		(Perchloroethylene)			
		Titanium tetrachloride	0.58	2.49	
		Toluene	1.34	5.89	
		Toluene-2,4-diaminie	0.57	2.46	
		2,4-Toluene diisocyanate	0.57	2.46	
		o-Toluidine	0.58	2.49	
		Toxaphene (chlorinated camphene)	0.58	2.49	
		1,2,4-Trichlorobenzene	1.14	4.99	
		1,1,2-Trichloroethane	1.14	5.01	
		Trichloroethylene*	1.26	5.53	

Permit #: 1009-AOP-R2

	EMISSION SUMMARY				
Source	Description	Pollutant	Emission Rates		
Number		1 Onutant	lb/hr	tpy	
		2,4,5-Trichlorophenol	0.58	2.49	
		2,4,6-Trichlorophenol	0.58	2.49	
		Triethylamine	0.58	2.49	
		Trifluralin	0.58	2.49	
		2,2,4-Trimethylpentane	0.80	3.48	
		Vinyl acetate	1.53	6.72	
		Vinyl bromide	0.58	2.49	
		Vinyl chloride	3.60	15.77	
		Vinylidene chloride (1,1-	3.60	15.78	
		Dichloroethylene)			
		Xylene (mixed isomers)	0.65	2.83	
		o-Xylene	0.65	2.83	
		m-Xylene	0.91	3.97	
		p-Xylene	0.68	2.96	
Aiı	Contaminants **	NaOH*	0.1	0.1	
		NaSH*	0.1	0.1	
		H_2S^*	0.1	0.1	
63.7.04		Refrigerant (non-VOC)	30.17	22.71	
SN-01	Fixed Incinerator Unit	PM_{10}	28.3	123.8	
		SO_2	45.1	21.2	
		VOC	2.1	9.1	
		CO	209.1	54.4	
		NO_X	34.2	149.8	
		PM	28.3	123.8	
		Acetaldehyde Acetamide	0.43 0.43	1.86	
			0.43	1.86 1.86	
		Acetonitrile	0.43	1.86	
		Acetophenone 2-Acetylaminoflourene	0.43	1.86	
		Acrolein	0.43	1.86	
		Acrylamide	0.43	1.86	
		Acrylic acid	0.43	1.86	
		Acrylonitrile	0.43	1.86	
		Allyl chloride	0.43	1.86	
		4-Aminobiphenyl	0.43	1.86	
		Aniline	0.43	1.86	
		o-Anisidine	0.43	1.86	
		Antimony Compounds	0.11	0.48	
		Arsenic	0.39	1.69	
		Arsenic Compounds	0.93	4.09	

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	EMISSION SUMMARY				
Source	Description	Pollutant	Emission Rates		
Number	Description	Tonutant	lb/hr	tpy	
		*Benzene (including	0.43	1.86	
		benzene from gasoline)			
		Benzidine	0.13	0.57	
		*Benzotrichloride	0.43	1.86	
		Benzyl chloride	0.43	1.86	
		Beryllium	6.10E-04	2.67E-03	
		Beryllium Compounds	5.40E-03	0.03	
		Biphenyl	0.43	1.86	
		Bis(2-ethylhexyl)phthalate (DEHP)	0.43	1.86	
		[Di-sec-octyl phthalate]			
		Bis(chloromethyl) ether	0.43	1.86	
		Bromoform	0.43	1.86	
		1,3-Butadiene	0.43	1.86	
		Cadmium	0.27	1.15	
		Cadmium Compounds	0.43	1.87	
		Calcium cyanamide	0.24	1.03	
		Caprolactam	0.43	1.86	
		Caprolactam (Vapor)	0.43	1.86	
		Captan	0.43	1.86	
		Carbaryl	0.43	1.86	
		Carbon disulfide	0.43	1.86	
		Carbon tetrachloride	0.43	1.86	
		Carbonyl sulfide	0.43	1.86	
		Catechol	0.43	1.86	
		Chloramben	0.43	1.86	
		Chlordane	0.43	1.86	
		Chlorine	3.11	13.62	
		Chloroacetic acid	0.43	1.86	
		2-Chloroacetophenone	0.43	1.86	
		Chlorobenzene	0.43	1.86	
		Chlorobenzilate	0.43	1.86	
		Chloroform	0.43	1.86	
		Chloromethyl methyl ether	0.43	1.86	
		Chloroprene	0.43	1.86	
		Chromium	1.42	6.23	
		Chromium Compounds	4.33	18.98	
		Cobalt Compounds	0.50	2.19	
		Cresols/Cresylic acid	0.43	1.86	
		(mixed isomers)			

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		EMISSION SUMMARY		
Source	Description	Pollutant -	Emissio	n Rates
Number	Description	Ponutant	lb/hr	tpy
		o-Cresol	0.43	1.86
		m-Cresol	0.43	1.86
		p-Cresol	0.43	1.86
		Cumene	0.43	1.86
		Cyanide Compounds	0.43	1.86
		2,4-D (2,4-	0.43	1.86
		Dichlorophenoxyacetic Acid) (including salts and esters)		
		DDE (1,1-dichloro-2,2-bis(p-chlorophenyl)	0.43	1.86
		ethylene)	0.42	1.06
		Diazomethane	0.43	1.86
		Dibenzofuran	0.43	1.86
		1,2-Dibromo-3- chloropropane	0.43	1.86
		Dibutyl phthalate	0.43	1.86
		1,4-Dichlorobenzene	0.43	1.86
		3,3'-Dichlorobenzidene	0.43	1.86
		Dichloroethyl ether (Bis[2-chloroethyl]ether)	0.43	1.86
		1,3-Dichloropropene	0.43	1.86
		Dichloryos	0.43	1.86
		Diethanolamine	0.43	1.86
		N,N-Dimethylaniline	0.43	1.86
		Diethyl sulfate	0.43	1.86
		3,3'-Dimethoxybenzidine	0.43	1.86
		4-Dimethylaminoazo benzene	0.43	1.86
		3,3'-Dimethylbenzidine [o-Tolidine]	0.43	1.86
		Dimethylcarbamoyl chloride	0.43	1.86
		N,N-Dimethylformamide	0.43	1.86
		1,1-Dimethylhydrazine	0.43	1.86
		Dimethyl phthalate	0.43	1.86
		Dimethyl sulfate	0.43	1.86
		4,6-Dinitro-o-cresol (including salts)	0.43	1.86
		2,4-Dinitrophenol	0.43	1.86

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	EMISSION SUMMARY				
Source	Description	Pollutant	Emissic	n Rates	
Number	Description	Tonutant	lb/hr	tpy	
		2,4-Dinitrotoluene	0.43	1.86	
		1,4-Dioxane (1,4-	0.43	1.86	
		Diethyleneoxide)	0.42	1.06	
		1,2-Diphenylhydrazine	0.43	1.86	
		Epichlorohydrin (1-Chloro-	0.43	1.86	
		2,3-epoxypropane)	0.42	1 06	
		1,2-Epoxybutane	0.43 0.43	1.86 1.86	
		Ethyl acrylate Ethylbenzene	0.43	1.86	
		Ethyl carbamate (Urethane)	0.43	1.86	
		Ethyl chloride	0.43	1.86	
		(Chloroethane)	0.43	1.00	
		Ethylene dibromide	0.43	1.86	
		(Dibromoethane)	0.15	1.00	
		Ethylene dichloride (1,2-	0.43	1.86	
		Dichloroethane)	0.1.0		
		Ethylene glycol	0.43	1.86	
		Ethyleneimine (Aziridine)	0.43	1.86	
		Ethylene oxide	0.43	1.86	
		Ethylene thiourea	0.43	1.86	
		Ethylidene dichloride (1,1-	0.43	1.86	
		Dichloroethane)			
		Formaldehyde	0.43	1.86	
		Glycol Ethers	0.43	1.86	
		Heptachlor	0.43	1.86	
		Hexachlorobenzene	0.43	1.86	
		Hexachlorobutadine	0.43	1.86	
		Hexachlorocyclopentadiene	0.43	1.86	
		Hexachloroethane	0.43	1.86	
		Hexamethylene	0.43	1.86	
		diisocyanate			
		Hexamethylphosphoramide	0.43	1.86	
		Hexane	0.43	1.86	
		Hydrazine	0.43	1.86	
		Hydrochloric acid*	31.10	136.40	
		(Hydrogen Chloride [gas			
		only])	6.00	27.24	
		Hydrogen fluoride	6.22	27.24	
		(Hydrofluoric acid)	0.43	1.86	
		Hydroquinone	0.43	1.80	

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		EMISSION SUMMARY		
Source	Description	Pollutant -	Emission Rates	
Number	Description	Tonutant	lb/hr	tpy
		Isophorone	0.43	1.86
		Lead	6.52	28.56
		Lead Compounds	11.74	51.41
		Lindane (1,2,3,4,5,6-	0.43	1.86
		Hexachlorocyclyhexane		
		[all stero isomers])		
		Maleic anhydride	0.43	1.86
		Manganese Compounds	10.00	43.80
		Mercury	0.25	1.10
		Mercury Compounds	0.34	1.48
		Methanol	0.43	1.86
		Methoxychlor	0.43	1.86
		Methyl bromide	0.43	1.86
		(Bromomethane)		
		Methyl chloride	0.43	1.86
		(Chloromethane)		
		Methyl chloroform (1,1,1-	0.43	1.86
		Trichloroethane)		
		Methyl ethyl ketone (2-	0.43	1.86
		Butanone)		
		Methylhydrazine	0.43	1.86
		Methyl iodide	0.43	1.86
		(Iodomethane)		
		Methyl isobutyl ketone	0.43	1.86
		(Hexone)		
		Methyl isocyanate	0.43	1.86
		Methyl methacrylate	0.43	1.86
		Methyl tert-butyl ether	0.43	1.86
		4,4'-Methylenebis(2-	0.43	1.86
		chloroaniline)		
		Methylene chloride*	0.43	1.86
		(Dichloromethane)		
		4,4'-Methylenediphenyl	0.43	1.86
		diisocyanate (MDI)		
		4,4'-Methylenedianiline	0.43	1.86
		Naphthalene	0.43	1.86
		Nickel Compounds	20.00	8.76
		Nitrobenzene	0.43	1.86
		4-Nitrobiphenyl	0.43	1.86
		[4-Nitrodiphenyl]		

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		EMISSION SUMMARY		
Source	Description	Pollutant	Emissic	on Rates
Number	Description	Tollatait	lb/hr	tpy
		4-Nitrophenol	0.43	1.86
		4-Nitropropane	0.43	1.86
		N-Nitroso-N-methylurea	0.13	0.57
		N-Nitrosodimethylamine	0.13	0.57
		N-Nitrosomorpholine	0.43	1.86
		Parathion	0.43	1.86
		Pentachloronitrobenzene (Quintobenzene)	0.43	1.86
		Pentachlorophenol	0.43	1.86
		Phenol	0.43	1.86
		p-Phenylenediamine	0.43	1.86
		Phosgene	0.43	1.86
		Phosphine	0.43	1.86
		Phosphorus	0.43	1.86
		Phthalic anhydride	0.43	1.86
		Polychlorinated biphenyls	2.12E-05	9.29E-05
		(Aroclors)		
		Polycyclic Organic Matter	0.16	0.68
		1,3-Propane sultone	0.43	1.86
		beta-Propiolactone	0.43	1.86
		Propionaldehyde	0.43	1.86
		Propoxur (Baygon)	0.43	1.86
		Propylene dichloride (1,2-	0.43	1.86
		Dichloropropane) Propylene oxide	0.43	1.86
		1,2-Propylenimine (2-	0.43	1.86
		Methylaziridine)	0.43	1.00
		[Propylene imine]		
		Quinoline	0.43	1.86
		Quinone (p-Benzoquinone)	0.43	1.86
		Selenium Compounds	5.00	21.90
		Styrene	0.43	1.86
		Styrene oxide	0.43	1.86
		2,3,7,8-	9.66E-05	4.23E-04
		Tetrachlorodibenzo-p-		
		dioxin		
		1,1,2,2-Tetrachloroethane	0.43	1.86
		Tetrachloroethylene* (Perchloroethylene)	0.43	1.86
		Titanium tetrachloride	0.43	1.86

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	EMISSION SUMMARY				
Source	Description	Pollutant	Emissio	n Rates	
Number	Description	Tonutant	lb/hr	tpy	
		Toluene	0.43	1.86	
		Toluene-2,4-diaminie	0.43	1.86	
		2,4-Toluene diisocyanate	0.43	1.86	
		o-Toluidine	0.43	1.86	
		Toxaphene (chlorinated camphene)	0.43	1.86	
		1,2,4-Trichlorobenzene	0.43	1.86	
		1,1,2-Trichloroethane	0.43	1.86	
		Trichloroethylene*	0.43	1.86	
		2,4,5-Trichlorophenol	0.43	1.86	
		2,4,6-Trichlorophenol	0.43	1.86	
		Triethylamine	0.43	1.86	
		Trifluralin	0.43	1.86	
		2,2,4-Trimethylpentane	0.43	1.86	
		Vinyl acetate	0.43	1.86	
		Vinyl bromide	0.43	1.86	
		Vinyl chloride	0.43	1.86	
		Vinylidene chloride (1,1- Dichloroethylene)	0.43	1.86	
		Xylene (mixed isomers)	0.43	1.86	
		o-Xylene	0.43	1.86	
		m-Xylene	0.43	1.86	
		p-Xylene	0.43	1.86	
SN-02	MWP-2000	PM ₁₀	5.1	22.2	
	Incinerator Unit	SO_2	10.0	21.1	
		VOC	1.0	4.4	
		CO	37.5	54.7	
		NO_X	14.8	60.3	
		PM	5.1	22.2	
		Acetaldehyde	0.13	0.57	
		Acetamide	0.13	0.57	
		Acetonitrile	0.13	0.57	
		Acetophenone	0.13	0.57	
		2-Acetylaminoflourene	0.13	0.57	
		Acrolein	0.13	0.57	
		Acrylamide	0.13	0.57	
		Acrylic acid	0.13	0.57	
		Acrylonitrile	0.13	0.57	
		Allyl chloride	0.13	0.57	
		4-Aminobiphenyl	0.13	0.57	

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		EMISSION SUMMARY		
Source	Description	Pollutant	Emissic	on Rates
Number	Description	Tonutunt	lb/hr	tpy
		Aniline	0.13	0.57
		o-Anisidine	0.13	0.57
		Antimony Compounds	0.04	0.14
		Arsenic	0.02	0.08
		Arsenic Compounds	0.05	0.19
		*Benzene (including	0.13	0.57
		benzene from gasoline)		
		Benzidine	9.91E-03	4.34E-02
		*Benzotrichloride	4.95E-02	2.17E-01
		Benzyl chloride	0.13	0.57
		Beryllium	1.10E-04	4.82E-04
		Beryllium Compounds	9.75E-04	4.27E-03
		Biphenyl	0.13	0.57
		Bis(2-ethylhexyl)phthalate	0.13	0.57
		(DEHP)		
		[Di-sec-octyl phthalate]		
		Bis(chloromethyl) ether	0.05	0.21
		Bromoform	0.13	0.57
		1,3-Butadiene	0.13	0.57
		Cadmium	0.02	0.07
		Cadmium Compounds	0.03	0.11
		Calcium cyanamide	0.13	0.57
		Caprolactam (Dust)	0.13	0.57
		Caprolactam (Vapor)	0.13	0.57
		Captan	0.13	0.57
		Carbaryl	0.13	0.57
		Carbon disulfide	0.13	0.57
		Carbon tetrachloride	0.13	0.57
		Carbonyl sulfide	0.13	0.57
		Catechol	0.13	0.57
		Chloramben	0.13	0.57
		Chlordane	0.13	0.57
		Chlorine	0.83	3.64
		Chloroacetic acid	0.13	0.57
		2-Chloroacetophenone	0.13	0.57
		Chlorobenzene	0.13	0.57
		Chlorobenzilate	0.13	0.57
		Chloroform	0.13	0.57
		Chloromethyl methyl ether	0.13	0.57
		Chloroprene	0.13	0.57

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		EMISSION SUMMARY		
Source	Description	Pollutant	Emissio	n Rates
Number	Description	Foliutalit	lb/hr	tpy
		Chromium	2.40E-03	0.02
		Chromium Compounds	7.31E-03	0.04
		Cobalt Compounds	0.16	0.67
		Cresols/Cresylic acid	0.13	0.57
		(mixed isomers)		
		o-Cresol	0.13	0.57
		m-Cresol	0.13	0.57
		p-Cresol	0.13	0.57
		Cumene	0.13	0.57
		Cyanide Compounds	0.13	0.57
		2,4-D (2,4-	0.13	0.57
		Dichlorophenoxyacetic		
		Acid)		
		(including salts and esters)		
		DDE (1,1-dichloro-2,2-	0.13	0.57
		bis(p-chlorophenyl)		
		ethylene)		
		Diazomethane	0.13	0.57
		Dibenzofuran	0.13	0.57
		1,2-Dibromo-3-	0.05	0.22
		chloropropane		
		Dibutyl phthalate	0.13	0.57
		1,4-Dichlorobenzene	0.13	0.57
		3,3'-Dichlorobenzidene	0.13	0.57
		Dichloroethyl ether	0.13	0.57
		(Bis[2-chloroethyl]ether)		
		1,3-Dichloropropene	0.13	0.57
		Dichlorvos	0.13	0.57
		Diethanolamine	0.13	0.57
		N,N-Dimethylaniline	0.13	0.57
		Diethyl sulfate	0.13	0.57
		3,3'-Dimethoxybenzidine	0.13	0.57
		4-Dimethylaminoazo	0.13	0.57
		benzene		
		3,3'-Dimethylbenzidine	0.05	0.22
		[o-Tolidine]		
		Dimethylcarbamoyl	0.13	0.57
		chloride		
		N,N-Dimethylformamide	0.13	0.57
		1,1-Dimethylhydrazine	0.13	0.57

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	EMISSION SUMMARY				
Source	Description	Pollutant	Emissic	on Rates	
Number	Description	Fonutant	lb/hr	tpy	
		Dimethyl phthalate	0.13	0.57	
		Dimethyl sulfate	0.13	0.57	
		4,6-Dinitro-o-cresol	0.13	0.57	
		(including salts)			
		2,4-Dinitrophenol	0.13	0.57	
		2,4-Dinitrotoluene	0.13	0.57	
		1,4-Dioxane (1,4-	0.13	0.57	
		Diethyleneoxide)			
		1,2-Diphenylhydrazine	0.13	0.57	
		Epichlorohydrin (1-Chloro-	0.13	0.57	
		2,3-epoxypropane)			
		1,2-Epoxybutane	0.13	0.57	
		Ethyl acrylate	0.13	0.57	
		Ethylbenzene	0.13	0.57	
		Ethyl carbamate (Urethane)	0.13	0.57	
		Ethyl chloride	0.13	0.57	
		(Chloroethane)			
		Ethylene dibromide	0.13	0.57	
		(Dibromoethane)			
		Ethylene dichloride (1,2-	0.13	0.57	
		Dichloroethane)			
		Ethylene glycol	0.13	0.57	
		Ethyleneimine (Aziridine)	0.13	0.57	
		Ethylene oxide	0.13	0.57	
		Ethylene thiourea	0.13	0.57	
		Ethylidene dichloride (1,1-	0.13	0.57	
		Dichloroethane)			
		Formaldehyde	0.13	0.57	
		Glycol Ethers	0.13	0.57	
		Heptachlor	0.13	0.57	
		Hexachlorobenzene	0.13	0.57	
		Hexachlorobutadine	0.13	0.57	
		Hexachlorocyclopentadiene	0.13	0.57	
		Hexachloroethane	0.13	0.57	
		Hexamethylene	0.13	0.57	
		diisocyanate			
		Hexamethylphosphoramide	0.05	0.22	
		Hexane	0.13	0.57	
		Hydrazine	0.13	0.57	

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		EMISSION SUMMARY		
Source	Description	Pollutant -	Emission Rates	
Number	Description	Politicalit	lb/hr	tpy
		Hydrochloric acid* (Hydrogen Chloride [gas only])	8.30	36.50
		Hydrogen fluoride (Hydrofluoric acid)	1.66	7.27
		Hydroquinone	0.13	0.57
		Isophorone	0.13	0.57
		Lindane (1,2,3,4,5,6- Hexachlorocyclyhexane [all stero isomers])	0.13	0.57
		Lead	0.50	2.17
		Lead Compounds	0.90	3.91
		Maleic anhydride	0.13	0.57
		Manganese Compounds	1.00	4.38
		Mercury	0.25	1.10
		Mercury Compounds	0.34	1.48
		Methanol	0.13	0.57
		Methoxychlor	0.13	0.57
		Methyl bromide	0.13	0.57
		(Bromomethane)	0.12	0.57
		Methyl chloride (Chloromethane)	0.13	0.57
		Methyl chloroform (1,1,1- Trichloroethane)	0.13	0.57
		Methyl ethyl ketone (2- Butanone)	0.13	0.57
		Methylhydrazine	0.13	0.57
		Methyl iodide (Iodomethane)	0.13	0.57
		Methyl isobutyl ketone (Hexone)	0.13	0.57
		Methyl isocyanate	0.13	0.57
		Methyl methacrylate	0.13	0.57
		Methyl tert-butyl ether	0.13	0.57
		4,4'-Methylenebis(2-	0.13	0.57
		chloroaniline) Methylene chloride*	0.13	0.57
		(Dichloromethane) 4,4'-Methylenediphenyl diisocyanate (MDI)	0.13	0.57

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	F	EMISSION SUMMARY		
Source	Description	Pollutant	Emissic	on Rates
Number	Description	Tonutant	lb/hr	tpy
		4,4'-Methylenedianiline	0.13	0.57
		Naphthalene	0.13	0.57
		Nickel Compounds	9.91	43.40
		Nitrobenzene	0.13	0.57
		4-Nitrobiphenyl	0.13	0.57
		[4-Nitrodiphenyl]		
		4-Nitrophenol	0.13	0.57
		4-Nitropropane	0.13	0.57
		N-Nitroso-N-methylurea	9.91E-03	0.05
		N-Nitrosodimethylamine	9.91E-03	0.05
		N-Nitrosomorpholine	0.13	0.57
		Parathion	0.13	0.57
		Pentachloronitrobenzene	0.13	0.57
		(Quintobenzene)		
		Pentachlorophenol	0.13	0.57
		Phenol	0.13	0.57
		p-Phenylenediamine	0.13	0.57
		Phosgene	0.13	0.57
		Phosphine	0.13	0.57
		Phosphorus	0.13	0.57
		Phthalic anhydride	0.13	0.57
		Polychlorinated biphenyls (Aroclors)	6.46E-06	2.83E-05
		Polycyclic Organic Matter	0.05	0.22
		1,3-Propane sultone	0.13	0.57
		beta-Propiolactone	0.13	0.57
		Propionaldehyde	0.13	0.57
		Propoxur (Baygon)	0.13	0.57
		Propylene dichloride (1,2-	0.13	0.57
		Dichloropropane)	31-2	
		Propylene oxide	0.13	0.57
		1,2-Propylenimine (2-	0.13	0.57
		Methylaziridine)		
		[Propylene imine]		
		Quinoline	0.13	0.57
		Quinone (p-Benzoquinone)	0.13	0.57
		Selenium Compounds	1.98	8.67
		Styrene	0.13	0.57
		Styrene oxide	0.13	0.57

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	EMISSION SUMMARY				
Source	Description	Pollutant	Emissio	n Rates	
Number	Description	Tonutant	lb/hr	tpy	
		2,3,7,8- Tetrachlorodibenzo-p- dioxin	2.94E-05	1.29E-04	
		1,1,2,2-Tetrachloroethane Tetrachloroethylene*	0.13 0.13	0.57 0.57	
		(Perchloroethylene) Titanium tetrachloride Toluene	0.13 0.13	0.57 0.57	
		Toluene-2,4-diaminie 2,4-Toluene diisocyanate o-Toluidine	0.13 0.13 0.13	0.57 0.57 0.57	
		Toxaphene (chlorinated camphene)	0.13	0.57	
		1,2,4-Trichlorobenzene 1,1,2-Trichloroethane Trichloroethylene*	0.13 0.13 0.13	0.57 0.57 0.57	
		2,4,5-Trichlorophenol 2,4,6-Trichlorophenol	0.13 0.13 0.13	0.57 0.57 0.57	
		Triethylamine Trifluralin	0.13 0.13	0.57 0.57	
		2,2,4-Trimethylpentane Vinyl acetate Vinyl bromide	0.13 0.13 0.13	0.57 0.57 0.57	
		Vinyl chloride Vinylidene chloride (1,1-	0.13 0.13	0.57 0.57	
		Dichloroethylene) Xylene (mixed isomers) o-Xylene	0.13 0.13	0.57 0.57	
02		m-Xylene p-Xylene	0.13 0.13	0.57 0.57	
03	Low Chloride	VOC Benzene Carbon Tetrachloride	3.8 0.61 3.70E-04	16.8 2.63 1.62E-03	
		Chlorobenzene Chloroform Ethyl Benzene	7.20E-03 0.16 0.04	0.04 0.64 0.16	
		Ethylene Dibromide Ethylene Dichloride	5.38E-03 1.49	0.03 6.53	
		Methyl Ethyl Ketone Methylene chloride*	4.27E-03 5.85E-03	0.02 0.03	

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	EMISSION SUMMARY				
Source	Description	Pollutant	Emission Rates		
Number	Description	1 Onutant	lb/hr	tpy	
		Naphthalene Propylene Dichloride Toluene Trichlorobenzene Trichloroethane Vinyl Chloride Vinylidene Chloride	0.04 9.39E-04 0.48 0.55 0.02 1.01E-03 3.11E-03	0.18 4.11E-03 2.08 2.41 0.06 4.42E-03 0.02	
04	Boiler #1	$\begin{array}{c} \text{Xylene} \\ \text{PM}_{10} \\ \text{SO}_2 \\ \text{VOC} \\ \text{CO} \\ \text{NO}_X \\ \text{PM} \end{array}$	0.24 27.5 246.2 0.2 2.9 30.8 27.5	1.03 7.6 35.5 22.4 30.7 150.6 7.6	
05	Boiler #2	$\begin{array}{c} \text{PM}_{10} \\ \text{SO}_2 \\ \text{VOC} \\ \text{CO} \\ \text{NO}_X \\ \text{PM} \end{array}$	27.5 246.2 0.2 2.9 30.8 27.5		
06	Boiler #3	$\begin{array}{c} PM_{10} \\ SO_2 \\ VOC \\ CO \\ NO_X \\ PM \end{array}$	26.4 94.1 0.1 1.2 11.8 26.4		
07	Solidification Building	${ m PM}_{10} \ { m PM}$	1.8 1.8	8.0 8.0	
08	Waste Fired Gas Boiler (Natural Only)	$\begin{array}{c} PM_{10} \\ SO_2 \\ VOC \\ CO \\ NO_X \\ PM \end{array}$	0.5 0.1 0.4 2.3 9.2 0.5	2.2 0.2 1.7 10.1 40.5 2.2	
09	Lime Silo Bin Vent	PM ₁₀ PM	0.3 0.3	0.1 0.1	

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EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
10	HCL Storage Tanks at TOU	HCL	0.1	0.1
11	Gasoline Storage Tank	VOC	0.1	0.2
12	Diesel Storage Tank	VOC	0.1	0.1
13	HCL Storage at WWTP	HCl	0.1	0.1
14	NaOH Storage at Brine Unit	NaOH*	0.1	0.1
15	NaSH Storage at Brine Unit	NaSH*	0.1	0.1
16	Brine Reactor Vessel	H_2S^*	0.1	0.1
17	WWTP Lime Silo	${ m PM}_{10} \ { m PM}$	0.3 0.3	0.1 0.1
18	Solidification Silo Bin Vent	PM ₁₀ PM	0.3 0.3	0.1 0.1
19	Waste Oil Storage	VOC	0.1	0.1
20	Lime Perma Batch Tank	PM ₁₀ PM	0.2 0.2	0.7 0.7
21	Organic Liquid	VOC Acetaldehyde Acetamide Acetonitrile Acetophenone Acrolein Acrylamide Acrylic acid Acrylonitrile Allyl chloride Aniline *Benzene (including benzene from gasoline)	1.3 2.52 5.52E-04 0.24 0.02 0.10 4.66E-05 0.04 0.38 1.30 8.70E-03 0.49	5.5 11.04 2.42E-03 1.02 0.05 0.44 2.04E-04 0.15 1.63 5.69 0.04 2.15
		Benzidine	1.72E-04	7.54E-04

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Source Description			
Describer	Pollutant	Emission Rates	
Number		lb/hr	tpy
	*Benzotrichloride	2.16E-03	9.46E-03
	Benzyl chloride	0.02	0.07
	Biphenyl	1.44E-04	6.32E-04
	Bis(e-chloroethyl) ether	0.11	0.47
	Bis(2-ethylhexyl)phthalate (DEHP)	3.66E-05	1.60E-04
	[Di-sec-octyl phthalate]		
	Bromoform	0.12	0.52
	1,3-Butadiene	1.91	8.34
	Caprolactam (Dust)	1.06E-05	4.63E-05
	Caprolactam (Vapor)	1.06E-05	4.63E-05
	Captan	2.80E-05	1.23E-04
	Carbaryl	1.88E-04	8.23E-04
	Carbon disulfide	1.93	8.46
	Carbon tetrachloride	1.18	5.16
	Carbonyl sulfide	5.62E-04	2.46E-03
	Catechol	1.03E-05	4.51E-05
	Chloramben	1.35E-04	5.90E-04
	Chlordane	3.82E-07	1.67E-06
	Chloroacetic acid	4.42E-03	0.02
	Chlorobenzene	0.09	0.37
	Chlorobenzilate	6.68E-08	2.93E-07
	Chloroform	1.58	6.91
	Chloroprene	1.29	5.65
	Cresols/Cresylic acid	1.45E-03	6.33E-03
	(mixed isomers)	0.405.00	0.00
	o-Cresol	2.42E-03	0.02
	m-Cresol	8.08E-04	3.54E-03
	p-Cresol	1.11E-03	4.87E-03
	Cumene	0.06	0.25
	2,4-D (2,4-	2.06E-04	9.02E-04
	Dichlorophenoxyacetic		
	Acid)		
	(including salts and esters)	2.200.05	0.645.05
	1,2-Dibromo-3-	2.20E-05	9.64E-05
	chloropropane	2.60E.07	1 145 06
	Dibutyl phthalate	2.60E-07	1.14E-06
	1,4-Dichlorobenzene 3,3'-Dichlorobenzidene	0.02	0.08
	Dichlorvos	2.36E-05 2.06E-04	1.03E-04 9.02E-04

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	EMISSION SUMMARY			
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		Diethanolamine	2.16E-06	9.46E-06
		N,N-Dimethylaniline	1.28E-04	5.62E-04
		Diethyl sulfate	0.15	0.64
		3,3'-Dimethoxybenzidine	2.28E-04	9.99E-04
		3,3'-Dimethylbenzidine [o-Tolidine]	1.98E-04	8.69E-04
		N,N-Dimethylformamide	0.03	0.11
		Dimethyl phthalate	1.82E-04	7.95E-04
		4,6-Dinitro-o-cresol	9.26E-07	4.06E-06
		(including salts)		
		2,4-Dinitrophenol	0.02	0.08
		2,4-Dinitrotoluene	0.02	0.08
		1,4-Dioxane (1,4-	0.20	0.85
		Diethyleneoxide)		
		1,2-Diphenylhydrazine	0.02	0.08
		Epichlorohydrin (1-Chloro-	0.09	0.38
		2,3-epoxypropane)		
		1,2-Epoxybutane	0.15	0.65
		Ethyl acrylate	0.28	1.21
		Ethylbenzene	0.07	0.27
		Ethyl chloride	2.52	11.04
		(Chloroethane)		
		Ethylene dibromide	8.66E-03	0.04
		(Dibromoethane)		
		Ethylene dichloride (1,2-	0.51	2.24
		Dichloroethane)		
		Ethylene glycol	6.96E-04	3.05E-03
		Ethylene thiourea	9.54E-05	4.18E-04
		Ethylidene dichloride (1,1-	1.54	6.72
		Dichloroethane)	6 FOR 03	0.02
		Formaldehyde	6.78E-03	0.03
		Glycol Ethers	0.05	0.20
		Heptachlor	1.05E-05	4.58E-05
		Hexachlorobenzene	8.06E-05	3.53E-04
		Hexachloroethane	0.02	0.05
		Hexamethylphosphoramide	1.68E-04	7.34E-04
		Hexane	0.88	3.86
		Hydroquinone	1.03E-05	4.51E-05
		Isophorone	3.22E-03	0.02

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		EMISSION SUMMARY		
Source Number	Description	Pollutant	Emission Rates	
		Tonutant	lb/hr	tpy
		Lindane (1,2,3,4,5,6-	2.56E-07	1.12E-06
		Hexachlorocyclyhexane		
		[all stero isomers])		
		Maleic anhydride	4.58E-03	2.01E-02
		Methanol	0.38	1.65
		Methoxychlor	3.24E-05	1.42E-04
		Methyl bromide	2.52	11.04
		(Bromomethane)		
		Methyl chloride	2.52	11.04
		(Chloromethane)	1.10	5.15
		Methyl chloroform (1,1,1-	1.18	5.17
		Trichloroethane)	0.22	1 10
		Methyl ethyl ketone (2-	0.33	1.42
		Butanone)	0.22	0.00
		Methyl isobutyl ketone	0.23	0.99
		(Hexone)	0.20	1.64
		Methyl methacrylate	0.38	1.64
		Methylere chloride*	1.68	7.35
		Methylene chloride*	2.52	11.04
		(Dichloromethane)	1 950 04	9 12E 04
		4,4'-Methylenedianiline	1.85E-04 1.55E-03	8.12E-04 6.81E-03
		Naphthalene Nitrobenzene	3.20E-03	0.81E-03
		4-Nitrophenol	3.20E-03 1.30E-04	5.69E-04
		4-Nitropropane	0.09	0.37
		N-Nitroso-N-methylurea	9.64E-05	4.22E-04
		N-Nitrosodimethylamine	6.92E-05	3.03E-04
		N-Nitrosomorpholine	1.09E-04	4.76E-04
		Parathion	1.03E-06	4.51E-06
		Pentachloronitrobenzene	2.76E-04	1.21E-03
		(Quintobenzene)	2.70L 01	1.212 03
		Pentachlorophenol	4.98E-06	2.18E-05
		Phenol	3.00E-04	1.31E-03
		p-Phenylenediamine	1.01E-05	4.42E-05
		Phthalic anhydride	2.08E-05	9.11E-05
		Propylene dichloride (1,2-	0.43	1.85
		Dichloropropane)		
		Propylene oxide	2.42	10.60
		Quinoline	1.21E-03	5.29E-03
		Quinone (p-Benzoquinone)	1.01E-04	4.42E-04

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	EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates		
			lb/hr	tpy	
		Styrene Styrene oxide	0.10 1.12E-04	0.43 4.92E-04	
		Tetrachloroethylene* (Perchloroethylene)	0.20	0.84	
		Toluene Toluene-2,4-diaminie	0.24 1.14E-05	1.06 5.00E-05	
		2,4-Toluene diisocyanate o-Toluidine	1.63E-04 1.50E-03	7.13E-04 6.58E-03	
		Toxaphene (chlorinated camphene)	3.86E-05	1.69E-04	
		1,2,4-Trichlorobenzene 1,1,2-Trichloroethane	4.24E-03 0.47	0.02 2.05	
		Trichloroethylene* 2,2,4-Trimethylpentane	0.58 0.19	2.54 0.80	
		Vinyl acetate Vinyl chloride	0.81 2.52	3.53 11.04	
		Vinylidene chloride (1,1- Dichloroethylene)	2.52	11.04	
		Xylene (mixed isomers)	0.07 0.07	0.30 0.29	
		o-Xylene m-Xylene p-Xylene	0.07 0.09 0.09	0.29 0.36 0.40	
22	Brine Plant Sources	PM ₁₀ PM	1.0 1.0	1.0 1.0	
23	Ground Water	VOC	0.2	0.6	
	Recovery System	*Benzene (including benzene from gasoline)	0.02	0.08	
		Carbon tetrachloride Chlorobenzene	1.06E-05 2.05E-04	4.64E-05 8.98E-04	
		Chloroform Ethylbenzene	4.12E-03 9.87E-04	0.02 4.32E-03	
		Ethylene dichloride (1,2- Dichloroethane)	0.05	0.19	
		Methyl ethyl ketone (2- Butanone)	1.22E-04	5.34E-04	
		Methylene chloride* (Dichloromethane)	1.67E-04	7.31E-04	
		Napthalene	1.15E-03	5.04E-03	

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EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		Propylene dichloride (1,2- Dichloropropane)	2.68E-05	1.17E-04
		Toluene 1,2,4-Trichlorobenzene	1.36E-02 0.02	5.96E-02 0.07
		1,1,2-Trichloroethane Vinyl chloride	3.60E-04 2.89E-05	1.58E-03 1.27E-04
		Vinylidene chloride (1,1- Dichloroethylene)	8.87E-05	3.89E-04
		m-Xylene	6.72E-03	0.03
24	Stationary Diesel Engines	Insignificant Activity		
25	Plant Fugitives	PM ₁₀ VOC PM	24.7 57.2 24.7	7.4 10.6 7.4
		Acetaldehyde Acetamide	0.53 0.02	2.30 0.06
		Acetonitrile	0.06	0.26
		Acetophenone 2-Acetylaminoflourene	0.02 0.02	0.07 0.06
		Acrolein	0.04	0.17
		Acrylamide Acrylic acid	9.97E-03 0.02	0.05 0.09
		Acrylonitrile	0.02	0.39
		Allyl chloride	0.35	1.50
		4-Aminobiphenyl Aniline	0.02 0.02	0.06 0.07
		o-Anisidine	0.02	0.06
		*Benzene (including benzene from gasoline)	0.12	0.49
		Benzidine *Benzotrichloride	3.67E-04 2.21E-03	1.60E-03 9.66E-03
		Benzyl chloride Biphenyl	0.02 0.02	0.07 0.06
		Bis(2-ethylhexyl)phthalate (DEHP)	0.02	0.06
		[Di-sec-octyl phthalate] Bis(chloromethyl) ether	1.56E-03	6.83E-03
		Bromoform 1,3-Butadiene Calcium cyanamide	0.04 0.50 0.02	0.16 2.17 0.06

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	EMISSION SUMMARY			
Source	Description	Pollutant	Emissic	n Rates
Number	Number	Tonutant	lb/hr	tpy
		Caprolactam (Dust)	0.02	0.06
		Caprolactam (Vapor)	0.02	0.06
		Captan	0.02	0.06
		Carbaryl	0.02	0.06
		Carbon disulfide	0.41	1.77
		Carbon tetrachloride	0.26	1.10
		Carbonyl sulfide	0.02	0.06
		Catechol	0.02	0.06
		Chloramben	0.02	0.06
		Chlordane	0.02	0.06
		Chlorine	0.02	0.06
		Chloroacetic acid	7.54E-03	3.30E-02
		2-Chloroacetophenone	0.02	0.06
		Chlorobenzene	0.03	0.13
		Chlorobenzilate	0.02	0.06
		Chloroform	0.33	1.46
		Chloromethyl methyl ether	0.02	0.06
		Chloroprene	0.28	1.20
		Cresols/Cresylic acid	0.02	0.06
		(mixed isomers)		
		o-Cresol	0.02	0.06
		m-Cresol	0.02	0.06
		p-Cresol	0.02	0.06
		Cumene	0.03	0.11
		2,4-D (2,4-	0.02	0.06
		Dichlorophenoxyacetic		
		Acid)		
		(including salts and esters)		
		DDE (1,1-dichloro-2,2-	0.02	0.06
		bis(p-chlorophenyl)		
		ethylene)		
		Diazomethane	0.02	0.06
		Dibenzofuran	0.02	0.06
		1,2-Dibromo-3-	1.66E-03	7.27E-03
		chloropropane	0.02	0.01
		Dibutyl phthalate	0.02	0.06
		1,4-Dichlorobenzene	0.02	0.07
		3,3'-Dichlorobenzidene	0.02	0.06
		Dichloroethyl ether	0.02	0.06
		(Bis[2-chloroethyl]ether)		

	EMISSION SUMMARY			
Source	Description	Pollutant	Emissic	n Rates
Number	Description	Tonutant	lb/hr	tpy
		1,3-Dichloropropene	0.02	0.06
		Dichlorvos	0.02	0.06
		Diethanolamine	0.02	0.06
		N,N-Dimethylaniline	0.02	0.06
		Diethyl sulfate	0.05	0.19
		3,3'-Dimethoxybenzidine	1.66E-03	7.27E-02
		4-Dimethylaminoazo	6.65E-03	2.91E-02
		benzene		
		3,3'-Dimethylbenzidine	0.02	0.06
		[o-Tolidine]		
		Dimethylcarbamoyl	0.02	0.06
		chloride		
		N,N-Dimethylformamide	0.02	0.08
		1,1-Dimethylhydrazine	0.02	0.06
		Dimethyl phthalate	0.02	0.06
		Dimethyl sulfate	0.02	0.06
		4,6-Dinitro-o-cresol	0.02	0.06
		(including salts)		
		2,4-Dinitrophenol	0.02	0.07
		2,4-Dinitrotoluene	0.02	0.07
		1,4-Dioxane (1,4-	0.06	0.23
		Diethyleneoxide)		
		1,2-Diphenylhydrazine	0.02	0.07
		Epichlorohydrin (1-Chloro-	0.04	0.14
		2,3-epoxypropane)		
		1,2-Epoxybutane	0.05	0.22
		Ethyl acrylate	0.07	0.30
		Ethylbenzene	0.03	0.11
		Ethyl carbamate (Urethane)	0.02	0.06
		Ethyl chloride	0.52	2.27
		(Chloroethane)		
		Ethylene dibromide	0.02	0.07
		(Dibromoethane)		
		Ethylene dichloride (1,2-	0.12	0.51
		Dichloroethane)		
		Ethylene glycol	0.02	0.06
		Ethyleneimine (Aziridine)	0.02	0.06
		Ethylene oxide	0.02	0.06
		Ethylene thiourea	0.02	0.06

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		EMISSION SUMMARY		
Source	Description	Pollutant	Emissic	on Rates
Number	Number	1 Onutunt	lb/hr	tpy
		Ethylidene dichloride (1,1-	0.33	1.42
		Dichloroethane)	0.02	0.06
		Formaldehyde	0.02 0.03	0.06
		Glycol Ethers		0.10
		Heptachlor Hexachlorobenzene	0.02 8.31E-03	0.06
		Hexachlorobenzene Hexachlorobutadine		3.64E-02
			0.02	0.06
		Hexachlorocyclopentadiene Hexachloroethane	0.02 0.02	0.06 0.07
			0.02	
		Hexamethylene	0.02	0.06
		diisocyanate	1 660 02	7 275 02
		Hexamethylphosphoramide Hexane	1.66E-03	7.27E-03
		Hydrazine	0.20 0.02	0.84 0.06
		Hydrochloric acid*	0.02	0.06
			0.02	0.00
		(Hydrogen Chloride [gas		
		only])	0.02	0.06
		Hydrogen fluoride (Hydrofluoric acid)	0.02	0.00
		Hydroquinone	0.02	0.06
		Isophorone	0.02	0.06
		Lindane (1,2,3,4,5,6-	0.02	0.06
		Hexachlorocyclyhexane	0.02	0.00
		[all stero isomers])		
		Maleic anhydride	0.02	0.06
		Methanol	0.02	0.39
		Methoxychlor	0.02	0.06
		Methyl bromide	0.53	2.30
		(Bromomethane)	0.55	2.30
		Methyl chloride	0.53	2.30
		(Chloromethane)	0.55	2.30
		Methyl chloroform (1,1,1-	0.26	1.11
		Trichloroethane)	0.20	1.11
		Methyl ethyl ketone (2-	0.08	0.35
		Butanone)	0.00	0.55
		Methylhydrazine	6.32E-03	2.77E-02
		Methyl iodide	0.32E-03 0.02	0.06
		(Iodomethane)	0.02	0.00
		Methyl isobutyl ketone	0.06	0.26
		(Hexone)	0.00	0.20

	EMISSION SUMMARY			
Source	Description	Pollutant	Emissio	n Rates
Number	Description	Tonutunt	lb/hr	tpy
		Methyl isocyanate	0.02	0.06
		Methyl methacrylate	0.09	0.39
		Methyl tert-butyl ether	0.36	1.54
		4,4'-Methylenebis(2-	0.02	0.06
		chloroaniline)		
		Methylene chloride*	0.53	2.30
		(Dichloromethane)		
		4,4'-Methylenediphenyl	0.02	0.06
		diisocyanate (MDI)		
		4,4'-Methylenedianiline	0.02	0.06
		Naphthalene	0.02	0.06
		Nitrobenzene	0.02	0.06
		4-Nitrobiphenyl	0.02	0.06
		[4-Nitrodiphenyl]		
		4-Nitrophenol	0.02	0.06
		4-Nitropropane	0.03	0.13
		N-Nitroso-N-methylurea	0.02	0.06
		N-Nitrosodimethylamine	3.32E-04	1.45E-03
		N-Nitrosomorpholine	0.02	0.06
		Parathion	0.02	0.06
		Pentachloronitrobenzene	0.02	0.06
		(Quintobenzene)		
		Pentachlorophenol	0.02	0.06
		Phenol	0.02	0.06
		p-Phenylenediamine	0.02	0.06
		Phosgene	0.02	0.06
		Phosphine	0.02	0.06
		Phosphorus	0.02	0.06
		Phthalic anhydride	0.02	0.06
		Polychlorinated biphenyls	0.02	0.06
		(Aroclors)		
		1,3-Propane sultone	0.02	0.06
		beta-Propiolactone	0.02	0.06
		Propionaldehyde	0.02	0.06
		Propoxur (Baygon)	0.02	0.06
		Propylene dichloride (1,2-	0.10	0.43
		Dichloropropane)		
		Propylene oxide	0.51	2.20

	EMISSION SUMMARY			
Source	Description	Pollutant	Emission Rates	
Number		1 Ondtant	lb/hr	tpy
		1,2-Propylenimine (2- Methylaziridine)	0.02	0.06
		[Propylene imine] Quinoline	0.02	0.06
		_	0.02	0.06
		Quinone (p-Benzoquinone)	0.02	0.06
		Styrene	0.04	
		Styrene oxide	0.02	0.06
		2,3,7,8- Tetrachlorodibenzo-p-	0.02	0.06
		dioxin		
		1,1,2,2-Tetrachloroethane	0.02	0.06
		Tetrachloroethylene*	0.05	0.22
		(Perchloroethylene)		
		Titanium tetrachloride	0.02	0.06
		Toluene Toluene-2,4-diaminie		0.27
				2.91E-02
		2,4-Toluene diisocyanate	6.65E-03	2.91E-02
		o-Toluidine	0.02	0.06
		Toxaphene (chlorinated	0.02	0.06
		camphene)		
		1,2,4-Trichlorobenzene	0.02	0.06
		1,1,2-Trichloroethane	0.11	0.47
		Trichloroethylene*	0.13	0.57
	2,4,5-Trichloropheno 2,4,6-Trichloropheno		0.02	0.06
			0.02	0.06
		Triethylamine	0.02	0.06
		Trifluralin	0.02	0.06
		2,2,4-Trimethylpentane	0.06	0.26
		Vinyl acetate	0.18	0.77
		Vinyl bromide	0.02	0.06
		Vinyl chloride	0.53	2.30
		Vinylidene chloride (1,1-	0.53	2.30
		Dichloroethylene)		
		Xylene (mixed isomers)	0.03	0.12
		o-Xylene	0.03	0.12
		m-Xylene	0.03	0.13
		p-Xylene	0.04	0.14
27	Aerosol Processing Machine (APM)	VOC	0.1	0.2

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EMISSION SUMMARY				
Source	Description	Pollutant	Emissio	sion Rates
Number	Description	Fonutant	lb/hr	tpy
28	Solvent Recovery	Refrigerant (non-VOC)**	0.17	0.21
	Process	Methylene Chloride*	0.17	0.21
	(with Package Units)	-		
	(SRP)			
29	Refrigerant Reclaim	Hydrogen Chloride*	2.00	1.65
	Process	Refrigerant (non-VOC)**	30.0	22.55
30	Refrigerant Reclaim	PM_{10}	0.1	0.4
	Boiler	SO_2	0.1	0.4
		VOC	0.1	0.4
		CO	0.2	0.7
		NO_X	0.2	0.9
		PM	0.10	0.40

^{*}HAPs NOT included in the VOC totals. Other HAPs are not included in any other totals unless specifically stated.

^{**}Air Contaminants such as ammonia, acetone, and certain halogenated solvents are not VOCs or HAPs.

SECTION III: PERMIT HISTORY

Permit 249-A was issued to Pollution Controls, Inc. on June 19, 1974. This is the initial permit for construction of this facility.

Permit 249-A(Modification) was issued on September 13, 1976 to update scrubber operation at the facility.

Permit 461-A was issued to ENSCO on December 1, 1977. This permit allowed for the installation and operation of equipment designed for the incineration of drummed solids, semisolids, and liquids such as PCB impregnated capacitors.

Permit 509-A was issued to ENSCO on August 1, 1978. This allowed for construction of a waste destruction system to handle NaK by reacting it with steam.

Permit 249-A(Modification) was issued to Ensco on July 24, 1981. This permit revised the design of the system to update the existing control equipment at the facility.

Permit 249-AR-3 was issued to Ensco, Inc. on March 25, 1983. This allowed for installation of a waste fuel fired boiler.

Permit 754-A was issued to ENSCO, Inc. on May 8, 1985. It allowed for construction and operation of a mobile incinerator, the MWP-2000 (SN-02).

Permit 1009-A was issued to ENSCO, Inc., on August 15, 1990. This permit consolidated permits 249-AR-3, 461-A, 509-A, and 754-A.

Permit 1009-AR-1 was issued to ENSCO, Inc., on June 9, 1992. This permit added a residue treatment facility which removed ferrous metals from the incinerator ash and also added the lime silo. Also, this permit removed a CEM requirement for SO₂ because the moisture content of the stack gases was greater than existing CEMs were able to overcome.

Permit 1009-AR-2 was issued to ENSCO, Inc., on May 5, 1993. This permit adjusted the emission values for NO_X . Because of this increase, CEMs were added to measure NO_X in the incinerator stacks.

Permit 1009-AR-3 was issued to ENSCO, Inc., on October 8, 1993. This permit allowed addition of a storage silo and changes to the ferrous metal recovery system. ENSCO also permitted previously unpermitted storage tanks.

Permit 1009-AR-4 was issued to Ensco, Inc., on November 16, 1993. This permit allowed for installation of the lime batch tank.

Permit 1009-AR-5 was issued to Ensco, Inc., on May 25, 1994. This permit allowed the installation of a baghouse to replace a wet scrubber on the lime handling system.

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Permit 1009-AR-5 was transferred to Teris, L.L.C., on July 25, 2001.

Permit 1009-AOP-R0 was issued to Teris, L.L.C. on May 1, 2002. This was the initial Title V permit for this facility.

Permit 1009-AOP-R0 was administratively amended on October 9, 2002. This amendment added a 5,000 gallon Sulfuric Acid Storage Tank to the Insignificant Activities List.

Permit 1009-AOP-R1 was issued to Teris, L.L.C. on September 10, 2003. This permit allowed for replacement of a heat exchanger on SN-01 with a direct-fired natural gas heater. Emissions from the combustion of natural gas were routed through the existing SN-01 stack. This resulted in the addition of 0.4 tpy of PM/PM $_{10}$, 0.1 tpy of SO $_{2}$, 0.3 tpy of VOC, 3.7 tpy of CO, and 4.4 tpy of NO $_{X}$.

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SECTION IV: SPECIFIC CONDITIONS

SN-01 Fixed Incinerator Unit

Source Description

The Fixed Incinerator Unit is comprised of two rotary kilns, a secondary combustion chamber referred to as the Thermal Oxidation Unit (TOU), and the Waste Fired Boiler (WFB). All of these combustion units have a combined capacity of 42,410 pounds/hour of waste feed. The kilns vent exhaust gases through their respective cyclones and into the TOU which serves as the common afterburner. The WFB exhaust gases are not vented to the TOU, but are vented directly to the pollution control equipment.

Specific Conditions

1. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #10 and #14 and equipment limitations. [§19.501 et seq. of Regulation #19, effective December 19, 2004 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	28.3	123.8
SO_2	45.1	21.2
VOC	2.1	9.1
СО	209.1	54.4
NO _x	34.2	149.8

2. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #10 and #14 and equipment limitations. [§18.801 of Regulation #18, effective February 15, 1999, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	28.3	123.8
Acetaldehyde	0.43	1.86
Acetamide	0.43	1.86
Acetonitrile	0.43	1.86

Pollutant	lb/hr	tpy
Acetophenone	0.43	1.86
2-Acetylaminoflourene	0.43	1.86
Acrolein	0.43	1.86
Acrylamide	0.43	1.86
Acrylic acid	0.43	1.86
Acrylonitrile	0.43	1.86
Allyl chloride	0.43	1.86
4-Aminobiphenyl	0.43	1.86
Aniline	0.43	1.86
o-Anisidine	0.43	1.86
Antimony Compounds	0.11	0.48
Arsenic	0.39	1.69
Arsenic Compounds	0.93	4.09
*Benzene (including benzene from gasoline)	0.43	1.86
Benzidine	0.13	0.57
*Benzotrichloride	0.43	1.86
Benzyl chloride	0.43	1.86
Beryllium	6.10E-04	2.67E-03
Beryllium Compounds	5.40E-03	0.03
Biphenyl	0.43	1.86
Bis(2-ethylhexyl)phthalate (DEHP) [Di-sec-octyl phthalate]	0.43	1.86
Bis(chloromethyl) ether	0.43	1.86
Bromoform	0.43	1.86
1,3-Butadiene	0.43	1.86
Cadmium	0.27	1.15
Cadmium Compounds	0.43	1.87

Pollutant	lb/hr	tpy
Calcium cyanamide	0.24	1.03
Caprolactam	0.43	1.86
Caprolactam (Vapor)	0.43	1.86
Captan	0.43	1.86
Carbaryl	0.43	1.86
Carbon disulfide	0.43	1.86
Carbon tetrachloride	0.43	1.86
Carbonyl sulfide	0.43	1.86
Catechol	0.43	1.86
Chloramben	0.43	1.86
Chlordane	0.43	1.86
Chlorine	3.11	13.62
Chloroacetic acid	0.43	1.86
2-Chloroacetophenone	0.43	1.86
Chlorobenzene	0.43	1.86
Chlorobenzilate	0.43	1.86
Chloroform	0.43	1.86
Chloromethyl methyl ether	0.43	1.86
Chloroprene	0.43	1.86
Chromium	1.42	6.23
Chromium Compounds	4.33	18.98
Cobalt Compounds	0.50	2.19
Cresols/Cresylic acid (mixed isomers)	0.43	1.86
o-Cresol	0.43	1.86
m-Cresol	0.43	1.86
p-Cresol	0.43	1.86

Pollutant	lb/hr	tpy
Cumene	0.43	1.86
Cyanide Compounds	0.43	1.86
2,4-D (2,4-Dichlorophenoxyacetic Acid) (including salts and esters)	0.43	1.86
DDE (1,1-dichloro-2,2-bis(p-chlorophenyl) ethylene)	0.43	1.86
Diazomethane	0.43	1.86
Dibenzofuran	0.43	1.86
1,2-Dibromo-3-chloropropane	0.43	1.86
Dibutyl phthalate	0.43	1.86
1,4-Dichlorobenzene	0.43	1.86
3,3'-Dichlorobenzidene	0.43	1.86
Dichloroethyl ether (Bis[2-chloroethyl]ether)	0.43	1.86
1,3-Dichloropropene	0.43	1.86
Dichlorvos	0.43	1.86
Diethanolamine	0.43	1.86
N,N-Dimethylaniline	0.43	1.86
Diethyl sulfate	0.43	1.86
3,3'-Dimethoxybenzidine	0.43	1.86
4-Dimethylaminoazo benzene	0.43	1.86
3,3'-Dimethylbenzidine [o-Tolidine]	0.43	1.86
Dimethylcarbamoyl chloride	0.43	1.86
N,N-Dimethylformamide	0.43	1.86
1,1-Dimethylhydrazine	0.43	1.86
Dimethyl phthalate	0.43	1.86
Dimethyl sulfate	0.43	1.86
4,6-Dinitro-o-cresol (including salts)	0.43	1.86

Pollutant	lb/hr	tpy
2,4-Dinitrophenol	0.43	1.86
2,4-Dinitrotoluene	0.43	1.86
1,4-Dioxane (1,4-Diethyleneoxide)	0.43	1.86
1,2-Diphenylhydrazine	0.43	1.86
Epichlorohydrin (1-Chloro-2,3- epoxypropane)	0.43	1.86
1,2-Epoxybutane	0.43	1.86
Ethyl acrylate	0.43	1.86
Ethylbenzene	0.43	1.86
Ethyl carbamate (Urethane)	0.43	1.86
Ethyl chloride (Chloroethane)	0.43	1.86
Ethylene dibromide (Dibromoethane)	0.43	1.86
Ethylene dichloride (1,2- Dichloroethane)	0.43	1.86
Ethylene glycol	0.43	1.86
Ethyleneimine (Aziridine)	0.43	1.86
Ethylene oxide	0.43	1.86
Ethylene thiourea	0.43	1.86
Ethylidene dichloride (1,1-Dichloroethane)	0.43	1.86
Formaldehyde	0.43	1.86
Glycol Ethers	0.43	1.86
Heptachlor	0.43	1.86
Hexachlorobenzene	0.43	1.86
Hexachlorobutadine	0.43	1.86
Hexachlorocyclopentadiene	0.43	1.86
Hexachloroethane	0.43	1.86
Hexamethylene diisocyanate	0.43	1.86

Pollutant	lb/hr	tpy
Hexamethylphosphoramide	0.43	1.86
Hexane	0.43	1.86
Hydrazine	0.43	1.86
Hydrochloric acid* (Hydrogen Chloride [gas only])	31.10	136.40
Hydrogen fluoride (Hydrofluoric acid)	6.22	27.24
Hydroquinone	0.43	1.86
Isophorone	0.43	1.86
Lead	6.52	28.56
Lead Compounds	11.74	51.41
Lindane (1,2,3,4,5,6- Hexachlorocyclyhexane [all stero isomers])	0.43	1.86
Maleic anhydride	0.43	1.86
Manganese Compounds	10.00	43.80
Mercury	0.25	1.10
Mercury Compounds	0.34	1.48
Methanol	0.43	1.86
Methoxychlor	0.43	1.86
Methyl bromide (Bromomethane)	0.43	1.86
Methyl chloride (Chloromethane)	0.43	1.86
Methyl chloroform (1,1,1- Trichloroethane)	0.43	1.86
Methyl ethyl ketone (2-Butanone)	0.43	1.86
Methylhydrazine	0.43	1.86
Methyl iodide (Iodomethane)	0.43	1.86
Methyl isobutyl ketone (Hexone)	0.43	1.86
Methyl isocyanate	0.43	1.86

Pollutant	lb/hr	tpy
Methyl methacrylate	0.43	1.86
Methyl tert-butyl ether	0.43	1.86
4,4'-Methylenebis(2-chloroaniline)	0.43	1.86
Methylene chloride* (Dichloromethane)	0.43	1.86
4,4'-Methylenediphenyl diisocyanate (MDI)	0.43	1.86
4,4'-Methylenedianiline	0.43	1.86
Naphthalene	0.43	1.86
Nickel Compounds	20.00	8.76
Nitrobenzene	0.43	1.86
4-Nitrobiphenyl [4-Nitrodiphenyl]	0.43	1.86
4-Nitrophenol	0.43	1.86
4-Nitropropane	0.43	1.86
N-Nitroso-N-methylurea	0.13	0.57
N-Nitrosodimethylamine	0.13	0.57
N-Nitrosomorpholine	0.43	1.86
Parathion	0.43	1.86
Pentachloronitrobenzene (Quintobenzene)	0.43	1.86
Pentachlorophenol	0.43	1.86
Phenol	0.43	1.86
p-Phenylenediamine	0.43	1.86
Phosgene	0.43	1.86
Phosphine	0.43	1.86
Phosphorus	0.43	1.86
Phthalic anhydride	0.43	1.86

Pollutant	lb/hr	tpy
Polychlorinated biphenyls (Aroclors)	2.12E-05	9.29E-05
Polycyclic Organic Matter	0.16	0.68
1,3-Propane sultone	0.43	1.86
beta-Propiolactone	0.43	1.86
Propionaldehyde	0.43	1.86
Propoxur (Baygon)	0.43	1.86
Propylene dichloride (1,2-Dichloropropane)	0.43	1.86
Propylene oxide	0.43	1.86
1,2-Propylenimine (2-Methylaziridine) [Propylene imine]	0.43	1.86
Quinoline	0.43	1.86
Quinone (p-Benzoquinone)	0.43	1.86
Selenium Compounds	5.00	21.90
Styrene	0.43	1.86
Styrene oxide	0.43	1.86
2,3,7,8-Tetrachlorodibenzo-p-dioxin	9.66E-05	4.23E-04
1,1,2,2-Tetrachloroethane	0.43	1.86
Tetrachloroethylene* (Perchloroethylene)	0.43	1.86
Titanium tetrachloride	0.43	1.86
Toluene	0.43	1.86
Toluene-2,4-diaminie	0.43	1.86
2,4-Toluene diisocyanate	0.43	1.86
o-Toluidine	0.43	1.86
Toxaphene (chlorinated camphene)	0.43	1.86
Toxaphene (emormated camphene)		

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Pollutant	lb/hr	tpy
1,1,2-Trichloroethane	0.43	1.86
Trichloroethylene*	0.43	1.86
2,4,5-Trichlorophenol	0.43	1.86
2,4,6-Trichlorophenol	0.43	1.86
Triethylamine	0.43	1.86
Trifluralin	0.43	1.86
2,2,4-Trimethylpentane	0.43	1.86
Vinyl acetate	0.43	1.86
Vinyl bromide	0.43	1.86
Vinyl chloride	0.43	1.86
Vinylidene chloride (1,1-Dichloroethylene)	0.43	1.86
Xylene (mixed isomers)	0.43	1.86
o-Xylene	0.43	1.86
m-Xylene	0.43	1.86
p-Xylene	0.43	1.86

^{*} NOT included in the total VOC.

3. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
01	20%	§18.501 of Regulation #18

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4. The permittee shall conduct weekly observations of the opacity from source SN-01 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [§18.501 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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SN-02 MWP-2000 Incinerator Unit

Source Description

The MWP-2000 Incinerator Unit is comprised of a single rotary kiln and a secondary combustion chamber. The combined capacity of all waste feed systems is 12,912 pounds/hour. The kiln vents exhaust gases to two separate hot cyclones. The secondary combustion chamber serves as an afterburner. The gases from the secondary combustion chamber are then vented to the air pollution control system which includes a quench system, a packed tower, and a steam jet eductor scrubber. This unit does have a Continuous Emissions Monitoring (CEM) system that measures oxygen and carbon monoxide for safety procedures and not to demonstrate compliance.

Specific Conditions

5. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #9 and #11, Plantwide Conditions #10 and #14, and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	5.1	22.2
SO_2	10.0	21.1
VOC	1.0	4.4
СО	37.5	54.7
NO _x	14.8	60.3

6. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #9, Plantwide Conditions #10 and #14, and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	5.1	22.2
Acetaldehyde	0.13	0.57
Acetamide	0.13	0.57
Acetonitrile	0.13	0.57

Pollutant	lb/hr	tpy
Acetophenone	0.13	0.57
2-Acetylaminoflourene	0.13	0.57
Acrolein	0.13	0.57
Acrylamide	0.13	0.57
Acrylic acid	0.13	0.57
Acrylonitrile	0.13	0.57
Allyl chloride	0.13	0.57
4-Aminobiphenyl	0.13	0.57
Aniline	0.13	0.57
o-Anisidine	0.13	0.57
Antimony Compounds	0.04	0.14
Arsenic	0.02	0.08
Arsenic Compounds	0.05	0.19
*Benzene (including benzene from gasoline)	0.13	0.57
Benzidine	9.91E-03	4.34E-02
*Benzotrichloride	4.95E-02	2.17E-01
Benzyl chloride	0.13	0.57
Beryllium	1.10E-04	4.82E-04
Beryllium Compounds	9.75E-04	4.27E-03
Biphenyl	0.13	0.57
Bis(2-ethylhexyl)phthalate (DEHP) [Di-sec-octyl phthalate]	0.13	0.57
Bis(chloromethyl) ether	0.05	0.21
Bromoform	0.13	0.57
1,3-Butadiene	0.13	0.57
Cadmium	0.02	0.07

Pollutant	lb/hr	tpy
Cadmium Compounds	0.03	0.11
Calcium cyanamide	0.13	0.57
Caprolactam (Dust)	0.13	0.57
Caprolactam (Vapor)	0.13	0.57
Captan	0.13	0.57
Carbaryl	0.13	0.57
Carbon disulfide	0.13	0.57
Carbon tetrachloride	0.13	0.57
Carbonyl sulfide	0.13	0.57
Catechol	0.13	0.57
Chloramben	0.13	0.57
Chlordane	0.13	0.57
Chlorine	0.83	3.64
Chloroacetic acid	0.13	0.57
2-Chloroacetophenone	0.13	0.57
Chlorobenzene	0.13	0.57
Chlorobenzilate	0.13	0.57
Chloroform	0.13	0.57
Chloromethyl methyl ether	0.13	0.57
Chloroprene	0.13	0.57
Chromium	2.40E-03	0.02
Chromium Compounds	7.31E-03	0.04
Cobalt Compounds	0.16	0.67
Cresols/Cresylic acid (mixed isomers)	0.13	0.57
o-Cresol	0.13	0.57
m-Cresol	0.13	0.57

Pollutant	lb/hr	tpy
p-Cresol	0.13	0.57
Cumene	0.13	0.57
Cyanide Compounds	0.13	0.57
2,4-D (2,4-Dichlorophenoxyacetic Acid) (including salts and esters)	0.13	0.57
DDE (1,1-dichloro-2,2-bis(p-chlorophenyl) ethylene)	0.13	0.57
Diazomethane	0.13	0.57
Dibenzofuran	0.13	0.57
1,2-Dibromo-3-chloropropane	0.05	0.22
Dibutyl phthalate	0.13	0.57
1,4-Dichlorobenzene	0.13	0.57
3,3'-Dichlorobenzidene	0.13	0.57
Dichloroethyl ether (Bis[2-chloroethyl]ether)	0.13	0.57
1,3-Dichloropropene	0.13	0.57
Dichlorvos	0.13	0.57
Diethanolamine	0.13	0.57
N,N-Dimethylaniline	0.13	0.57
Diethyl sulfate	0.13	0.57
3,3'-Dimethoxybenzidine	0.13	0.57
4-Dimethylaminoazo benzene	0.13	0.57
3,3'-Dimethylbenzidine [o-Tolidine]	0.05	0.22
Dimethylcarbamoyl chloride	0.13	0.57
N,N-Dimethylformamide	0.13	0.57
1,1-Dimethylhydrazine	0.13	0.57
Dimethyl phthalate	0.13	0.57

Pollutant	lb/hr	tpy
Dimethyl sulfate	0.13	0.57
4,6-Dinitro-o-cresol (including salts)	0.13	0.57
2,4-Dinitrophenol	0.13	0.57
2,4-Dinitrotoluene	0.13	0.57
1,4-Dioxane (1,4-Diethyleneoxide)	0.13	0.57
1,2-Diphenylhydrazine	0.13	0.57
Epichlorohydrin (1-Chloro-2,3-epoxypropane)	0.13	0.57
1,2-Epoxybutane	0.13	0.57
Ethyl acrylate	0.13	0.57
Ethylbenzene	0.13	0.57
Ethyl carbamate (Urethane)	0.13	0.57
Ethyl chloride (Chloroethane)	0.13	0.57
Ethylene dibromide (Dibromoethane)	0.13	0.57
Ethylene dichloride (1,2-Dichloroethane)	0.13	0.57
Ethylene glycol	0.13	0.57
Ethyleneimine (Aziridine)	0.13	0.57
Ethylene oxide	0.13	0.57
Ethylene thiourea	0.13	0.57
Ethylidene dichloride (1,1-Dichloroethane)	0.13	0.57
Formaldehyde	0.13	0.57
Glycol Ethers	0.13	0.57
Heptachlor	0.13	0.57
Hexachlorobenzene	0.13	0.57
Hexachlorobutadine	0.13	0.57

Pollutant	lb/hr	tpy
Hexachlorocyclopentadiene	0.13	0.57
Hexachloroethane	0.13	0.57
Hexamethylene diisocyanate	0.13	0.57
Hexamethylphosphoramide	0.05	0.22
Hexane	0.13	0.57
Hydrazine	0.13	0.57
Hydrochloric acid* (Hydrogen Chloride [gas only])	8.30	36.50
Hydrogen fluoride (Hydrofluoric acid)	1.66	7.27
Hydroquinone	0.13	0.57
Isophorone	0.13	0.57
Lindane (1,2,3,4,5,6- Hexachlorocyclyhexane [all stero isomers])	0.13	0.57
Lead	0.50	2.17
Lead Compounds	0.90	3.91
Maleic anhydride	0.13	0.57
Manganese Compounds	1.00	4.38
Mercury	0.25	1.10
Mercury Compounds	0.34	1.48
Methanol	0.13	0.57
Methoxychlor	0.13	0.57
Methyl bromide (Bromomethane)	0.13	0.57
Methyl chloride (Chloromethane)	0.13	0.57
Methyl chloroform (1,1,1-Trichloroethane)	0.13	0.57
Methyl ethyl ketone (2-Butanone)	0.13	0.57
Methylhydrazine	0.13	0.57

Pollutant	lb/hr	tpy
Methyl iodide (Iodomethane)	0.13	0.57
Methyl isobutyl ketone (Hexone)	0.13	0.57
Methyl isocyanate	0.13	0.57
Methyl methacrylate	0.13	0.57
Methyl tert-butyl ether	0.13	0.57
4,4'-Methylenebis(2-chloroaniline)	0.13	0.57
Methylene chloride* (Dichloromethane)	0.13	0.57
4,4'-Methylenediphenyl diisocyanate (MDI)	0.13	0.57
4,4'-Methylenedianiline	0.13	0.57
Naphthalene	0.13	0.57
Nickel Compounds	9.91	43.40
Nitrobenzene	0.13	0.57
4-Nitrobiphenyl [4-Nitrodiphenyl]	0.13	0.57
4-Nitrophenol	0.13	0.57
4-Nitropropane	0.13	0.57
N-Nitroso-N-methylurea	9.91E-03	0.05
N-Nitrosodimethylamine	9.91E-03	0.05
N-Nitrosomorpholine	0.13	0.57
Parathion	0.13	0.57
Pentachloronitrobenzene (Quintobenzene)	0.13	0.57
Pentachlorophenol	0.13	0.57
Phenol	0.13	0.57
p-Phenylenediamine	0.13	0.57
Phosgene	0.13	0.57
Phosphine	0.13	0.57

Pollutant	lb/hr	tpy
Phosphorus	0.13	0.57
Phthalic anhydride	0.13	0.57
Polychlorinated biphenyls (Aroclors)	6.46E-06	2.83E-05
Polycyclic Organic Matter	0.05	0.22
1,3-Propane sultone	0.13	0.57
beta-Propiolactone	0.13	0.57
Propionaldehyde	0.13	0.57
Propoxur (Baygon)	0.13	0.57
Propylene dichloride (1,2-Dichloropropane)	0.13	0.57
Propylene oxide	0.13	0.57
1,2-Propylenimine (2-Methylaziridine) [Propylene imine]	0.13	0.57
Quinoline	0.13	0.57
Quinone (p-Benzoquinone)	0.13	0.57
Selenium Compounds	1.98	8.67
Styrene	0.13	0.57
Styrene oxide	0.13	0.57
2,3,7,8-Tetrachlorodibenzo-p- dioxin	2.94E-05	1.29E-04
1,1,2,2-Tetrachloroethane	0.13	0.57
Tetrachloroethylene* (Perchloroethylene)	0.13	0.57
Titanium tetrachloride	0.13	0.57
Toluene	0.13	0.57
Toluene-2,4-diaminie	0.13	0.57
2,4-Toluene diisocyanate	0.13	0.57
o-Toluidine	0.13	0.57

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Pollutant	lb/hr	tpy
Toxaphene (chlorinated camphene)	0.13	0.57
1,2,4-Trichlorobenzene	0.13	0.57
1,1,2-Trichloroethane	0.13	0.57
Trichloroethylene*	0.13	0.57
2,4,5-Trichlorophenol	0.13	0.57
2,4,6-Trichlorophenol	0.13	0.57
Triethylamine	0.13	0.57
Trifluralin	0.13	0.57
2,2,4-Trimethylpentane	0.13	0.57
Vinyl acetate	0.13	0.57
Vinyl bromide	0.13	0.57
Vinyl chloride	0.13	0.57
Vinylidene chloride (1,1-Dichloroethylene)	0.13	0.57
Xylene (mixed isomers)	0.13	0.57
o-Xylene	0.13	0.57
m-Xylene	0.13	0.57
p-Xylene	0.13	0.57

7. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
02	20%	§18.501 of Regulation #18

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- 8. The permittee shall conduct weekly observations of the opacity from source SN-02 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [§18.501 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 9. The permittee shall record the differential pressure across the packing tower daily. When the differential pressure reaches 16.0 inches of water, the permittee will change the tower packing. [§19.703 of Regulation #19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 10. The permittee shall maintain records which demonstrate compliance with Specific Condition #9. These records will include the pressure readings and the dates that the packing was changed. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]
- 11. In order to show compliance with the NO_X emission limit, the permittee shall not operate SN-02 more than 8,152 hours during any consecutive twelve month period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]
- 12. The permittee shall maintain monthly records which demonstrate compliance with the operation limit set in Specific Condition #11. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

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SN-03 Low Chloride Water Treatment

Source Description

The site Teris currently occupies was previously the site of an oil refinery. To recover and clean the contaminated ground water, Teris operates ground water recovery systems and a treatment plant. Low chloride water is treated at the on-site treatment plant (SN-03). This system consists of a physical/chemical treatment system.

Specific Conditions

13. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #15 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	3.8	16.8

14. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #15 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Benzene	0.61	2.63
Carbon Tetrachloride	3.70E-04	1.62E-03
Chlorobenzene	7.20E-03	0.04
Chloroform	0.16	0.64
Ethyl Benzene	0.04	0.16
Ethylene Dibromide	5.38E-03	0.03
Ethylene Dichloride	1.49	6.53
Methyl Ethyl Ketone	4.27E-03	0.02
Methylene chloride*	5.85E-03	0.03
Naphthalene	0.04	0.18

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Pollutant	lb/hr	tpy
Propylene Dichloride	9.39E-04	4.11E-03
Toluene	0.48	2.08
Trichlorobenzene	0.55	2.41
Trichloroethane	0.02	0.06
Vinyl Chloride	1.01E-03	4.42E-03
Vinylidene Chloride	3.11E-03	0.02
Xylene	0.24	1.03

- 15. The permittee shall not process more than 72,014,500 gallons of water in SN-03 during any consecutive twelve month period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]
- 16. The permittee shall maintain monthly records which demonstrate compliance with the throughput limit set in Specific Condition #15. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

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SN-04, SN-05, and SN-06 Boilers #1, #2, and #3

Source Description

Teris currently operates three natural gas fired package boilers to produce steam which is used to create a venturi jet downstream of the Fixed Incinerator Unit scrubber. These boilers have a heat input capacity of 84 MMBTU/hr for SN-04 and SN-05, and 32 MMBTU/hr for SN-06. Teris is requesting that annual emissions for these three sources be bubbled. A retrofit of one or more of the boilers to also burn waste derived fuels is also being requested. Hourly emissions are based on the worst case waste derived fuel emissions.

Specific Conditions

17. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #23 and #25, Plantwide Conditions #26 and #27, and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

SN	Pollutant	lb/hr	tpy
	PM_{10}	27.5	
	SO_2	246.2	
04	VOC	0.2	
	СО	2.9	
	NO _x	30.8	
	PM_{10}	27.5	7.6
	SO_2	246.2	35.5
05	VOC	0.2	22.4
	СО	2.9	30.7
	NO_x	30.8	150.6
	PM ₁₀	26.4	
	SO_2	94.1	
06	VOC	0.1]
	CO	1.2	
	NO_x	11.8]

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18. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #23 and #25, Plantwide Conditions #26 and #27, and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Pollutant	lb/hr	tpy
04	PM	27.5	
05	PM	27.5	7.5
06	OM	26.4	

19. The permittee shall not exceed the emission rates set forth in the following table when burning waste fuel in SN-04, SN-05, and SN-06 combined. The permittee shall demonstrate compliance with this condition by Specific Condition #23 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	81.4	7.6
SO_2	586.5	35.5
VOC	0.4	2.4
СО	5.7	6.9
NO _x	92.4	73.4

20. When burning waste fuel, visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
04	20%	§18.501 of Regulation #18
05	20%	§18.501 of Regulation #18
06	20%	§18.501 of Regulation #18

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21. The permittee shall conduct daily observations of the opacity from sources SN-04, SN-05, and SN-06 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [§18.501 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

22. When burning natural gas, visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
04	5%	§18.501 of Regulation #18
05	5%	§18.501 of Regulation #18
06	5%	§18.501 of Regulation #18

- 23. The permittee shall not burn in excess of 11,685,840 gallons of hazardous waste derived fuels in SN-04, SN-05, and SN-06 combined during any consecutive twelve month period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]
- 24. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #23. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]
- 25. The permittee shall not exceed 2.8 weight percent sulfur content in the waste derived fuel. [§19.501 et seq. of Regulation #19 and 40 CFR 60.43c(h)]
- 26. The permittee shall maintain records which demonstrate compliance with the emission limits set in Specific Condition #25. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

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SN-07 Solidification Building

Source Description

Ash solidification occurs within an enclosed structure equipped with a baghouse. Ash from the incinerators is moved via truck to the Solidification Building where it is placed in a mixing container and mixed with an absorbent to remove all free moisture. The mixing process results in the emission of absorbent dust which is collected by an Aeropulse Baghouse.

Specific Conditions

27. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	1.8	8.0

28. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	1.8	8.0

29. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
07	5%	§18.501 of Regulation #18

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30. The permittee shall conduct weekly observations of the opacity from source SN-07 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [§18.501 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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SN-08 Waste Fired Boiler (Natural Gas Only)

Source Description

The Waste Fired Boiler is exhausted through the air pollution control train for the Fixed Incineration Unit (SN-01) when burning waste liquids, and emissions are accounted for in SN-01 during such operations. However, natural gas is burned in the WFB to bring it up to temperature prior to burning waste, and at least for one hour following burning of waste. In the one hour following burning of waste, the WFB is also exhausted through SN-01, but at other times when burning natural gas, the WFB may exhaust directly to the atmosphere.

Specific Conditions

31. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #26 and #27 and equipment limitations. These emissions are for natural gas combustion only. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	0.5	2.2
SO_2	0.1	0.2
VOC	0.4	1.7
CO	2.3	10.1
NO _x	9.2	40.5

32. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #26 and #27 and equipment limitations. These emissions are for natural gas combustion only. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.5	2.2

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33. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. Compliance will be demonstrated by burning only natural gas. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
08	5%	§18.501 of Regulation #18

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SN-09 Lime Silo Bin Vent

Source Description

Lime is used in the incinerator air pollution control train. Lime may be stored on-site in a lime silo. Emissions occur when lime is transferred from trucks into the silo. Emissions are controlled by a silo bent baghouse.

Specific Conditions

34. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	0.3	0.1

35. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.3	0.1

36. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
09	5%	§18.501 of Regulation #18

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37. The permittee shall conduct weekly observations of the opacity from source SN-09 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [§18.501 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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SN-10 HCl Storage Tanks at TOU

Source Description

Dilute hydrochloric acid (HCl) is used to wash the TOU demister pads in order to maintain demister efficiency. Three storage tanks are utilized which store varying concentrations of HCl. Emissions from these tanks are controlled by a scrubber.

Specific Conditions

38. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #39 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
HCl	0.1	0.1

39. The permittee shall operate the scrubber per manufacturer's specifications at all times that HCl is stored at SN-10. [§18.1104 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311,]

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SN-11 Gasoline Storage Tank

Source Description

The Gasoline Storage tank has a capacity of 1,000 gallons of unleaded gasoline. The tank is located in the concrete containment area behind the Fire Station/Safety Office. The tank is used to fuel Teris owned vehicles within the plant.

Specific Conditions

40. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #41 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	0.1	0.2

- 41. The permittee shall not have a throughput in excess of 31,300 gallons of gasoline at SN-11 during any consecutive twelve month period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]
- 42. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #41. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

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SN-12 Diesel Storage Tank

Source Description

The Diesel Storage tank has a capacity of 1,000 gallons of diesel fuel. The tank is located in the concrete containment area behind the Fire Station/Safety Office. The tank is used to fuel Teris owned vehicles within the plant.

Specific Conditions

43. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #44 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	0.1	0.1

- 44. The permittee shall not have a throughput in excess of 60,880 gallons of Diesel Fuel in SN-12 during any consecutive twelve month period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]
- 45. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #44. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

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SN-13 HCl Storage at WWTP

Source Description

Emissions of HCl can occur during filling of the acid storage tank. These vapors are directed to a water scrubber prior to venting to the atmosphere.

Specific Conditions

46. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #47 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
HCl	0.1	0.1

47. The permittee shall operate the scrubber per manufacturers specifications at all times that HCl is filled at SN-13. [§18.1104 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311,]

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SN-14 NaOH Storage at Brine Unit

Source Description

Sodium Hydroxide (NaOH) or lime and Sodium Hydrogen Sulfide (NaSH) are used during the treatment of scrubber brine at the brine unit. The NaOH adjusts the brine to a pH range in which the NaSH can react with any metals that may be in the scrubber brine.

Specific Conditions

48. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
NaOH	0.1	0.1

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SN-15 NaSH Storage at Brine Unit

Source Description

Sodium Hydroxide (NaOH) or lime and Sodium Hydrogen Sulfide (NaSH) are used during the treatment of scrubber brine at the brine unit. The NaOH adjusts the brine to a pH range in which the NaSH can react with any metals that may be in the scrubber brine.

Specific Conditions

49. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
NaSH	0.1	0.1

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SN-16 Brine Reactor Vessel

Source Description

Sodium Hydroxide (NaOH) or lime and Sodium Hydrogen Sulfide (NaSH) are used during the treatment of scrubber brine at the brine unit. The NaOH adjusts the brine to a pH range in which the NaSH can react with any metals that may be in the scrubber brine. A small amount of H_2S gas may be produced in the brine batch reactor. This gas is vented through a NaOH scrubber to the atmosphere.

Specific Conditions

50. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #51 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
H ₂ S	0.1	0.1

51. The permittee shall operate the scrubber per manufacturers specifications at all times that SN-16 is in operation. [§18.1104 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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SN-17 WWTP Lime Silo

Source Description

The pebble sized lime is received in transport trucks. The trucks have blowers mounted on them, which pneumatically convey the lime from the truck to the Lime Silo. The baghouse, which is mounted on top of the Lime Silo, filters the conveying air as it is exhausted to the silo.

Specific Conditions

52. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	0.3	0.1

The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.3	0.1

54. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
17	5%	§18.501 of Regulation #18

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55. The permittee shall conduct weekly observations of the opacity from source SN-17 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [§18.501 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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SN-18 Solidification Silo Bin Vent

Source Description

Ash solidification occurs within an enclosed structure equipped with a baghouse. Ash from the incinerators is moved via truck to the Solidification Building where it is placed in a mixing container and mixed with an absorbent to remove all free moisture. The mixing process results in the emission of absorbent dust which is collected by an Aeropulse Baghouse.

Specific Conditions

56. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	0.3	0.1

57. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.3	0.1

58. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
18	5%	§18.501 of Regulation #18

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59. The permittee shall conduct weekly observations of the opacity from source SN-18 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [§18.501 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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SN-19 Waste Oil Storage

Source Description

The vehicle repair shop, located in the Crown Building north of the facility proper, generates approximately 250 gallons per month of lubrication oils during servicing and repair of Teris' vehicles. This waste oil is poured into a 500 gallon tank. Approximately every two months, this oil is removed by a vacuum truck and disposed via incineration in the incinerator.

Specific Conditions

60. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	0.1	0.1

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SN-20 Lime Perma Batch Tank

Source Description

The Teris lime slurry preparation is a batch system. A predetermined volume of water is added to the lime batch tank. A ribbon blender is installed inside the tank. This blender mixes the dry hydrated and/or pebble lime to form a lime-water slurry. The dry hydrated lime and/or pebble lime is delivered via truck and is pneumatically conveyed from the truck to the batch tank. The batch tank is equipped with a baghouse.

Specific Conditions

61. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	0.2	0.7

62. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.2	0.7

63. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
20	5%	§18.501 of Regulation #18

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64. The permittee shall conduct weekly observations of the opacity from source SN-20 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [§18.501 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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SN-21 Organic Liquid Waste Tanks

Source Description

Teris operates 32 tanks in organic liquid wastes services. These tanks have a total capacity of 1,411,655 gallons. Each tank is vented through an activated carbon adsorber.

Specific Conditions

65. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #68, #70, and #71, Plantwide Condition #12, and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	1.3	5.5

66. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #68, #70, and #71, Plantwide Condition #12, and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Acetaldehyde	2.52	11.04
Acetamide	5.52E-04	2.42E-03
Acetonitrile	0.24	1.02
Acetophenone	0.02	0.05
Acrolein	0.10	0.44
Acrylamide	4.66E-05	2.04E-04
Acrylic acid	0.04	0.15
Acrylonitrile	0.38	1.63
Allyl chloride	1.30	5.69
Aniline	8.70E-03	0.04
*Benzene (including benzene from gasoline)	0.49	2.15

Pollutant	lb/hr	tpy
Benzidine	1.72E-04	7.54E-04
*Benzotrichloride	2.16E-03	9.46E-03
Benzyl chloride	0.02	0.07
Biphenyl	1.44E-04	6.32E-04
Bis(e-chloroethyl) ether	0.11	0.47
Bis(2-ethylhexyl)phthalate (DEHP) [Di-sec-octyl phthalate]	3.66E-05	1.60E-04
Bromoform	0.12	0.52
1,3-Butadiene	1.91	8.34
Caprolactam (Dust)	1.06E-05	4.63E-05
Caprolactam (Vapor)	1.06E-05	4.63E-05
Captan	2.80E-05	1.23E-04
Carbaryl	1.88E-04	8.23E-04
Carbon disulfide	1.93	8.46
Carbon tetrachloride	1.18	5.16
Carbonyl sulfide	5.62E-04	2.46E-03
Catechol	1.03E-05	4.51E-05
Chloramben	1.35E-04	5.90E-04
Chlordane	3.82E-07	1.67E-06
Chloroacetic acid	4.42E-03	0.02
Chlorobenzene	0.09	0.37
Chlorobenzilate	6.68E-08	2.93E-07
Chloroform	1.58	6.91
Chloroprene	1.29	5.65
Cresols/Cresylic acid (mixed isomers)	1.45E-03	6.33E-03
o-Cresol	2.42E-03	0.02
m-Cresol	8.08E-04	3.54E-03

Pollutant	lb/hr	tpy
p-Cresol	1.11E-03	4.87E-03
Cumene	0.06	0.25
2,4-D (2,4-Dichlorophenoxyacetic Acid) (including salts and esters)	2.06E-04	9.02E-04
1,2-Dibromo-3-chloropropane	2.20E-05	9.64E-05
Dibutyl phthalate	2.60E-07	1.14E-06
1,4-Dichlorobenzene	0.02	0.08
3,3'-Dichlorobenzidene	2.36E-05	1.03E-04
Dichlorvos	2.06E-04	9.02E-04
Diethanolamine	2.16E-06	9.46E-06
N,N-Dimethylaniline	1.28E-04	5.62E-04
Diethyl sulfate	0.15	0.64
3,3'-Dimethoxybenzidine	2.28E-04	9.99E-04
3,3'-Dimethylbenzidine [o-Tolidine]	1.98E-04	8.69E-04
N,N-Dimethylformamide	0.03	0.11
Dimethyl phthalate	1.82E-04	7.95E-04
4,6-Dinitro-o-cresol (including salts)	9.26E-07	4.06E-06
2,4-Dinitrophenol	0.02	0.08
2,4-Dinitrotoluene	0.02	0.08
1,4-Dioxane (1,4-Diethyleneoxide)	0.20	0.85
1,2-Diphenylhydrazine	0.02	0.08
Epichlorohydrin (1-Chloro-2,3-epoxypropane)	0.09	0.38
1,2-Epoxybutane	0.15	0.65
Ethyl acrylate	0.28	1.21
Ethylbenzene	0.07	0.27

Pollutant	lb/hr	tpy
Ethyl chloride (Chloroethane)	2.52	11.04
Ethylene dibromide (Dibromoethane)	8.66E-03	0.04
Ethylene dichloride (1,2-Dichloroethane)	0.51	2.24
Ethylene glycol	6.96E-04	3.05E-03
Ethylene thiourea	9.54E-05	4.18E-04
Ethylidene dichloride (1,1-Dichloroethane)	1.54	6.72
Formaldehyde	6.78E-03	0.03
Glycol Ethers	0.05	0.20
Heptachlor	1.05E-05	4.58E-05
Hexachlorobenzene	8.06E-05	3.53E-04
Hexachloroethane	0.02	0.05
Hexamethylphosphoramide	1.68E-04	7.34E-04
Hexane	0.88	3.86
Hydroquinone	1.03E-05	4.51E-05
Isophorone	3.22E-03	0.02
Lindane (1,2,3,4,5,6- Hexachlorocyclyhexane [all stero isomers])	2.56E-07	1.12E-06
Maleic anhydride	4.58E-03	2.01E-02
Methanol	0.38	1.65
Methoxychlor	3.24E-05	1.42E-04
Methyl bromide (Bromomethane)	2.52	11.04
Methyl chloride (Chloromethane)	2.52	11.04
Methyl chloroform (1,1,1-Trichloroethane)	1.18	5.17
Methyl ethyl ketone (2-Butanone)	0.33	1.42
Methyl isobutyl ketone (Hexone)	0.23	0.99

Pollutant	lb/hr	tpy
Methyl methacrylate	0.38	1.64
Methyl tert-butyl ether	1.68	7.35
Methylene chloride* (Dichloromethane)	2.52	11.04
4,4'-Methylenedianiline	1.85E-04	8.12E-04
Naphthalene	1.55E-03	6.81E-03
Nitrobenzene	3.20E-03	0.02
4-Nitrophenol	1.30E-04	5.69E-04
4-Nitropropane	0.09	0.37
N-Nitroso-N-methylurea	9.64E-05	4.22E-04
N-Nitrosodimethylamine	6.92E-05	3.03E-04
N-Nitrosomorpholine	1.09E-04	4.76E-04
Parathion	1.03E-06	4.51E-06
Pentachloronitrobenzene (Quintobenzene)	2.76E-04	1.21E-03
Pentachlorophenol	4.98E-06	2.18E-05
Phenol	3.00E-04	1.31E-03
p-Phenylenediamine	1.01E-05	4.42E-05
Phthalic anhydride	2.08E-05	9.11E-05
Propylene dichloride (1,2-Dichloropropane)	0.43	1.85
Propylene oxide	2.42	10.60
Quinoline	1.21E-03	5.29E-03
Quinone (p-Benzoquinone)	1.01E-04	4.42E-04
Styrene	0.10	0.43
Styrene oxide	1.12E-04	4.92E-04
Tetrachloroethylene* (Perchloroethylene)	0.20	0.84
Toluene	0.24	1.06

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Pollutant	lb/hr	tpy
Toluene-2,4-diaminie	1.14E-05	5.00E-05
2,4-Toluene diisocyanate	1.63E-04	7.13E-04
o-Toluidine	1.50E-03	6.58E-03
Toxaphene (chlorinated camphene)	3.86E-05	1.69E-04
1,2,4-Trichlorobenzene	4.24E-03	0.02
1,1,2-Trichloroethane	0.47	2.05
Trichloroethylene*	0.58	2.54
2,2,4-Trimethylpentane	0.19	0.80
Vinyl acetate	0.81	3.53
Vinyl chloride	2.52	11.04
Vinylidene chloride (1,1-Dichloroethylene)	2.52	11.04
Xylene (mixed isomers)	0.07	0.30
o-Xylene	0.07	0.29
m-Xylene	0.09	0.36
p-Xylene	0.09	0.40

^{*} NOT included in the total VOC.

- 67. Tank Numbers 1 through 11 are subject to regulation under NSPS Ka Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984. [§19.304 of Regulation #19 and 40 CFR §60.110a(a)]
- 68. For all tanks subject to NSPS Ka (Tanks Numbers 1 through 11), the permittee shall keep records of the operating plan for the use of carbon canisters and the maintenance performed on the canisters. The operating plan shall be submitted to the Department within 90 days of the date of permit issuance for approval. [§19.304 of Regulation #19 and 40 CFR §60.115b(c)]
- 69. Tank Numbers 12 through 15 and 602 through 609 are subject to regulation under NSPS Kb Standards of Performance for Volatile Organic Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. [§19.304 of Regulation #19 and 40 CFR §60.110b(a)]

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70. The permittee shall keep records showing the dimension of Tank Number 12 through 15 and 602 through 609 and an analysis showing the capacity of each storage vessel. Records shall be kept on site and be provided to Department personnel upon request. [§19.304 of Regulation #19 and 40 CFR §60.116b(b)]

71. The permittee shall maintain carbon canisters per manufacturer's specifications on each tank while any waste is being stored in it. [§19.303 of Regulation #19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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SN-22 Brine Plant Sources

Source Description

Wastes containing chlorinated hydrocarbon compounds which are incinerated at this facility are broken down into carbon dioxide, water, and hydrochloric acid. The incinerator air pollution control equipment removes the majority of the HCl. This process results in the production of calcium chloride in a liquid form referred to as "scrubber brine." The calcium chloride and entrained particulates are recirculated in the control system until a predetermined specific gravity is achieved. Once the predetermined specific gravity is achieved, the solution is sold as completion fluids for use in oil-wells and is also sold for other brine product applications.

Specific Conditions

72. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	1.0	1.0

73. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	1.0	1.0

74. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
22	5%	§18.501 of Regulation #18

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75. The permittee shall conduct weekly observations of the opacity from source SN-22 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request. [§18.501 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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SN-23 Ground Water Recovery System

Source Description

The site Teris currently occupies was previously the site of an oil refinery. Various operation at this site have contributed in ground water contamination. To recover and clean the contaminated ground water, Teris operates a ground water recovery system. Recovered ground water which is high in chlorides removed as part of the cleanup process is routed by piping to the quench and scrubber at the fixed incinerator unit. Ground water recovered by the system which is low in chlorides is routed to the Low Chloride Water Treatment facility (SN-03).

Specific Conditions

76. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #15 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	0.2	0.6

77. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #15 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
*Benzene (including benzene from gasoline)	0.02	0.08
Carbon tetrachloride	1.06E-05	4.64E-05
Chlorobenzene	2.05E-04	8.98E-04
Chloroform	4.12E-03	0.02
Ethylbenzene	9.87E-04	4.32E-03
Ethylene dichloride (1,2-Dichloroethane)	0.05	0.19
Methyl ethyl ketone (2-Butanone)	1.22E-04	5.34E-04

Pollutant	lb/hr	tpy
Methylene chloride* (Dichloromethane)	1.67E-04	7.31E-04
Napthalene	1.15E-03	5.04E-03
Propylene dichloride (1,2-Dichloropropane)	2.68E-05	1.17E-04
Toluene	1.36E-02	5.96E-02
1,2,4-Trichlorobenzene	0.02	0.07
1,1,2-Trichloroethane	3.60E-04	1.58E-03
Vinyl chloride	2.89E-05	1.27E-04
Vinylidene chloride (1,1-Dichloroethylene)	8.87E-05	3.89E-04
m-Xylene	6.72E-03	0.03

NOT included in the total VOC.

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SN-25 Plant Fugitives

Source Description

Plant fugitives include drum sampling, waste repackaging, pumps, flanges, and valves, tanker and railcar cleaning, loading, and unloading, rolloff loading and unloading, vacuum truck loading and unloading, equipment and truck washing and decontamination, barrel crushing, empty drum storage, and unpaved roads. There are no controls in place at this time.

Specific Conditions

78. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM ₁₀	24.7	7.4
VOC	57.2	10.6

79. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	24.7	7.4
Acetaldehyde	0.53	2.30
Acetamide	0.02	0.06
Acetonitrile	0.06	0.26
Acetophenone	0.02	0.07
2-Acetylaminoflourene	0.02	0.06
Acrolein	0.04	0.17
Acrylamide	9.97E-03	0.05
Acrylic acid	0.02	0.09
Acrylonitrile	0.09	0.39

Pollutant	lb/hr	tpy
Allyl chloride	0.35	1.50
4-Aminobiphenyl	0.02	0.06
Aniline	0.02	0.07
o-Anisidine	0.02	0.06
*Benzene (including benzene from gasoline)	0.12	0.49
Benzidine	3.67E-04	1.60E-03
*Benzotrichloride	2.21E-03	9.66E-03
Benzyl chloride	0.02	0.07
Biphenyl	0.02	0.06
Bis(2-ethylhexyl)phthalate (DEHP) [Di-sec-octyl phthalate]	0.02	0.06
Bis(chloromethyl) ether	1.56E-03	6.83E-03
Bromoform	0.04	0.16
1,3-Butadiene	0.50	2.17
Calcium cyanamide	0.02	0.06
Caprolactam (Dust)	0.02	0.06
Caprolactam (Vapor)	0.02	0.06
Captan	0.02	0.06
Carbaryl	0.02	0.06
Carbon disulfide	0.41	1.77
Carbon tetrachloride	0.26	1.10
Carbonyl sulfide	0.02	0.06
Catechol	0.02	0.06
Chloramben	0.02	0.06
Chlordane	0.02	0.06

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Pollutant	lb/hr	tpy
Chloroacetic acid	7.54E-03	3.30E-02
2-Chloroacetophenone	0.02	0.06
Chlorobenzene	0.03	0.13
Chlorobenzilate	0.02	0.06
Chloroform	0.33	1.46
Chloromethyl methyl ether	0.02	0.06
Chloroprene	0.28	1.20
Cresols/Cresylic acid (mixed isomers)	0.02	0.06
o-Cresol	0.02	0.06
m-Cresol	0.02	0.06
p-Cresol	0.02	0.06
Cumene	0.03	0.11
2,4-D (2,4- Dichlorophenoxyacetic Acid) (including salts and esters)	0.02	0.06
DDE (1,1-dichloro-2,2-bis(p-chlorophenyl) ethylene)	0.02	0.06
Diazomethane	0.02	0.06
Dibenzofuran	0.02	0.06
1,2-Dibromo-3-chloropropane	1.66E-03	7.27E-03
Dibutyl phthalate	0.02	0.06
1,4-Dichlorobenzene	0.02	0.07
3,3'-Dichlorobenzidene	0.02	0.06
Dichloroethyl ether (Bis[2-chloroethyl]ether)	0.02	0.06
1,3-Dichloropropene	0.02	0.06
Dichlorvos	0.02	0.06
Diethanolamine	0.02	0.06

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Pollutant	lb/hr	tpy
N,N-Dimethylaniline	0.02	0.06
Diethyl sulfate	0.05	0.19
3,3'-Dimethoxybenzidine	1.66E-03	7.27E-02
4-Dimethylaminoazo benzene	6.65E-03	2.91E-02
3,3'-Dimethylbenzidine [o-Tolidine]	0.02	0.06
Dimethylcarbamoyl chloride	0.02	0.06
N,N-Dimethylformamide	0.02	0.08
1,1-Dimethylhydrazine	0.02	0.06
Dimethyl phthalate	0.02	0.06
Dimethyl sulfate	0.02	0.06
4,6-Dinitro-o-cresol (including salts)	0.02	0.06
2,4-Dinitrophenol	0.02	0.07
2,4-Dinitrotoluene	0.02	0.07
1,4-Dioxane (1,4-Diethyleneoxide)	0.06	0.23
1,2-Diphenylhydrazine	0.02	0.07
Epichlorohydrin (1-Chloro-2,3-epoxypropane)	0.04	0.14
1,2-Epoxybutane	0.05	0.22
Ethyl acrylate	0.07	0.30
Ethylbenzene	0.03	0.11
Ethyl carbamate (Urethane)	0.02	0.06
Ethyl chloride (Chloroethane)	0.52	2.27
Ethylene dibromide (Dibromoethane)	0.02	0.07
Ethylene dichloride (1,2-Dichloroethane)	0.12	0.51
Ethylene glycol	0.02	0.06

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Pollutant	lb/hr	tpy
Ethyleneimine (Aziridine)	0.02	0.06
Ethylene oxide	0.02	0.06
Ethylene thiourea	0.02	0.06
Ethylidene dichloride (1,1-Dichloroethane)	0.33	1.42
Formaldehyde	0.02	0.06
Glycol Ethers	0.03	0.10
Heptachlor	0.02	0.06
Hexachlorobenzene	8.31E-03	3.64E-02
Hexachlorobutadine	0.02	0.06
Hexachlorocyclopentadiene	0.02	0.06
Hexachloroethane	0.02	0.07
Hexamethylene diisocyanate	0.02	0.06
Hexamethylphosphoramide	1.66E-03	7.27E-03
Hexane	0.20	0.84
Hydrazine	0.02	0.06
Hydrochloric acid* (Hydrogen Chloride [gas only])	0.02	0.06
Hydrogen fluoride (Hydrofluoric acid)	0.02	0.06
Hydroquinone	0.02	0.06
Isophorone	0.02	0.06
Lindane (1,2,3,4,5,6- Hexachlorocyclyhexane [all stero isomers])	0.02	0.06
Maleic anhydride	0.02	0.06
Methanol	0.09	0.39
Methoxychlor	0.02	0.06
Methyl bromide (Bromomethane)	0.53	2.30

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Pollutant	lb/hr	tpy
Methyl chloride (Chloromethane)	0.53	2.30
Methyl chloroform (1,1,1-Trichloroethane)	0.26	1.11
Methyl ethyl ketone (2-Butanone)	0.08	0.35
Methylhydrazine	6.32E-03	2.77E-02
Methyl iodide (Iodomethane)	0.02	0.06
Methyl isobutyl ketone (Hexone)	0.06	0.26
Methyl isocyanate	0.02	0.06
Methyl methacrylate	0.09	0.39
Methyl tert-butyl ether	0.36	1.54
4,4'-Methylenebis (2-chloroaniline)	0.02	0.06
Methylene chloride* (Dichloromethane)	0.53	2.30
4,4'-Methylenediphenyl diisocyanate (MDI)	0.02	0.06
4,4'-Methylenedianiline	0.02	0.06
Naphthalene	0.02	0.06
Nitrobenzene	0.02	0.06
4-Nitrobiphenyl [4-Nitrodiphenyl]	0.02	0.06
4-Nitrophenol	0.02	0.06
4-Nitropropane	0.03	0.13
N-Nitroso-N-methylurea	0.02	0.06
N-Nitrosodimethylamine	3.32E-04	1.45E-03
N-Nitrosomorpholine	0.02	0.06
Parathion	0.02	0.06
Pentachloronitrobenzene (Quintobenzene)	0.02	0.06

Pollutant	lb/hr	tpy
Pentachlorophenol	0.02	0.06
Phenol	0.02	0.06
p-Phenylenediamine	0.02	0.06
Phosgene	0.02	0.06
Phosphine	0.02	0.06
Phosphorus	0.02	0.06
Phthalic anhydride	0.02	0.06
Polychlorinated biphenyls (Aroclors)	0.02	0.06
1,3-Propane sultone	0.02	0.06
beta-Propiolactone	0.02	0.06
Propionaldehyde	0.02	0.06
Propoxur (Baygon)	0.02	0.06
Propylene dichloride (1,2-Dichloropropane)	0.10	0.43
Propylene oxide	0.51	2.20
1,2-Propylenimine (2-Methylaziridine) [Propylene imine]	0.02	0.06
Quinoline	0.02	0.06
Quinone (p-Benzoquinone)	0.02	0.06
Styrene	0.04	0.15
Styrene oxide	0.02	0.06
2,3,7,8-Tetrachlorodibenzo-p- dioxin	0.02	0.06
1,1,2,2-Tetrachloroethane	0.02	0.06
Tetrachloroethylene* (Perchloroethylene)	0.05	0.22
Titanium tetrachloride	0.02	0.06
Toluene	0.07	0.27

Pollutant	lb/hr	tpy
Toluene-2,4-diaminie	6.65E-03	2.91E-02
2,4-Toluene diisocyanate	6.65E-03	2.91E-02
o-Toluidine	0.02	0.06
Toxaphene (chlorinated camphene)	0.02	0.06
1,2,4-Trichlorobenzene	0.02	0.06
1,1,2-Trichloroethane	0.11	0.47
Trichloroethylene*	0.13	0.57
2,4,5-Trichlorophenol	0.02	0.06
2,4,6-Trichlorophenol	0.02	0.06
Triethylamine	0.02	0.06
Trifluralin	0.02	0.06
2,2,4-Trimethylpentane	0.06	0.26
Vinyl acetate	0.18	0.77
Vinyl bromide	0.02	0.06
Vinyl chloride	0.53	2.30
Vinylidene chloride (1,1-Dichloroethylene)	0.53	2.30
Xylene (mixed isomers)	0.03	0.12
o-Xylene	0.03	0.12
m-Xylene	0.03	0.13
p-Xylene	0.04	0.14

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SN-27 Aerosol Processing Machine (APM)

Source Description

The APM (SN-27) will be used to recover metals for recycling from aerosol cans and paint cans. The off-gasses of the APM will be normally routed to the existing Secondary Combustion Chamber to destroy any combustibles. Under special operation conditions where paint cans are being crushed and off-gas flows are minuscule, the off-gasses are routed through an Activated Carbon Unit included with the APM.

Specific Conditions

80. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #81 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	0.1	0.2

- 81. During operation of the Activated Carbon Unit as a replacement for the Secondary Combustion Chamber, the permittee shall use good engineering judgment and/or vendor recommendations to determine the maximum allowable operating time of the activated carbon in the unit. This maximum allowable operating time shall be established at the time of each recharging/changing of the carbon. The carbon shall be replaced before the maximum allowable operating time is reached. [§19.703 of Regulation #19, 40 CFR 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 82. The permittee shall maintain a log of the recharging/changing of the carbon used in the Activated Carbon Unit. These records shall be maintained on site and made available to Department personnel upon request. [§19.705 of Regulation #19 and 40 CFR 52, Subpart E]

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SN-28 Solvent Recovery Process (with Package Units)(SRP)

Source Description

The SRP (SN-28) is a distillation process which will be used to reclaim halogenated type solvents. The non-condensable off-gasses of the SRP will be routed to the existing Secondary Combustion Chamber to destroy any combustibles. When gases cannot be routed to the SCC (such as when the SCC is not operating or being serviced) the condenser overhead gases will be routed to an Activated Carbon Unit included with the SRP.

Specific Conditions

83. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #84 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Refrigerant (non-VOC)*	0.17	0.21
Methylene Chloride*	0.17	0.21

^{*} Not included in the VOC total.

- 84. During operation of the Activated Carbon Unit as a replacement for the Secondary Combustion Chamber, the permittee shall use good engineering judgment and/or vendor recommendations to determine the maximum allowable operating time of the activated carbon in the unit. This maximum allowable operating time shall be established at the time of each recharging/changing of the carbon. The carbon shall be replaced before the maximum allowable operating time is reached. [§19.703 of Regulation #19, 40 CFR 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 85. The permittee shall maintain a log of the recharging/changing of the carbon used in the Activated Carbon Unit. These records shall be maintained on site and made available to Department personnel upon request. [§19.705 of Regulation #19 and 40 CFR 52, Subpart E]

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SN-29 Refrigerant Reclaim Process

Source Description

The Refrigerant Reclaim Process (SN-29) is designed to separate chlorodifluoromethane (R-22) from mixed and unmixed refrigerant streams. The reclaimed R-22 product will meet ARI 700 specification and will be suitable for use in refrigerant systems or other applications. Incoming refrigerant streams will be regulated under 40 CFR Part 82, 150-166 which regulates production, use, and handling of ozone depleting substances. The process includes provisions for storage of bulk and containerized refrigerant receipts, gas compressors and pumps for material transfer, reclaim equipment to removed moisture and gross contamination, a distillation column for separation of R-22, process tanks, and intermediate and final product storage tanks.

Specific Conditions

86. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #87 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Hydrogen Chloride*	2.00	1.65
Refrigerant (Non-VOC)*	30.0	22.50

^{*} Not included in VOC totals.

- 87. The permittee shall not process in excess of 3,000,000 pounds of refrigerant in SN-29 during any consecutive twelve month period. [§18.1004. of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 88. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #87. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department in accordance with General Condition #7. [§18.1004. of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 89. Pursuant to §19.304 of Regulation 19 and 40 CFR 82, Subpart F, the Refrigerant Reclaim Process is subject to regulation under 40 CFR Part 82, Protection of Stratospheric Ozone, Subpart F, Recycling and Emissions Reduction.

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SN-30 Refrigerant Reclaim Process Boiler

Source Description

The Refrigerant Reclaim Process Boiler (SN-30) is used to provide heat and steam for the Refrigerant Reclaim Process (SN-29). It is a 2.0 MMBTU/hr, natural gas-fired unit.

Specific Conditions

90. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by burning only natural gas. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	0.1	0.4
SO_2	0.1	0.4
VOC	0.1	0.4
СО	0.2	0.7
NO _x	0.2	0.9

91. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by burning only natural gas. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.1	0.4

92. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. Compliance will be demonstrated by burning only natural gas. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

SN	Limit	Regulatory Citation
30	5%	§18.501 of Regulation #18

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SECTION V: COMPLIANCE PLAN AND SCHEDULE

Teris, L.L.C. will continue to operate in compliance with those identified regulatory provisions. The facility will examine and analyze future regulations that may apply and determine their applicability with any necessary action taken on a timely basis.

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SECTION VI: PLANTWIDE CONDITIONS

- 1. The permittee shall notify the Director in writing within thirty (30) days after commencing construction, completing construction, first placing the equipment and/or facility in operation, and reaching the equipment and/or facility target production rate. [Regulation 19, §19.704, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 2. If the permittee fails to start construction within eighteen months or suspends construction for eighteen months or more, the Director may cancel all or part of this permit. [Regulation 19, §19.410(B) and 40 CFR Part 52, Subpart E]
- 3. The permittee must test any equipment scheduled for testing, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) new equipment or newly modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source or (2) operating equipment according to the time frames set forth by the Department or within 180 days of permit issuance if no date is specified. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. The permittee shall submit the compliance test results to the Department within thirty (30) days after completing the testing. [Regulation 19, §19.702 and/or Regulation 18 §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 4. The permittee must provide: [Regulation 19, §19.702 and/or Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
 - a. Sampling ports adequate for applicable test methods;
 - b. Safe sampling platforms;
 - c. Safe access to sampling platforms; and
 - d. Utilities for sampling and testing equipment.
- 5. The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee shall maintain the equipment in good condition at all times. [Regulation 19, §19.303 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 6. This permit subsumes and incorporates all previously issued air permits for this facility. [Regulation 26 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 7. The permittee must prepare and implement a Startup, Shutdown, and Malfunction Plan (SSM). If the Department requests a review of the SSM, the permittee will make the SSM available for review. The permittee must keep a copy of the SSM at the source's location and retain all previous versions of the SSM plan for five years. [Regulation 19, §19.304 and 40 CFR 63.6(e)(3)]

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8. The permittee shall not load in excess of 12,000,000 gallons of organic liquids into all tanks combined during any rolling 12 month period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

- 9. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Plantwide Condition #8. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]
- 10. The waste materials processed at the kilns shall not exceed the HAP content limits listed in the following table. Note that all HAPs not listed can be present at 100% concentrations without exceeding the ambient criteria at the property line. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

Component	Kilns 1 & 2 Concentration %	Kiln 3 Concentration %
Benzidine	30.8	7.8
Benzotrichloride	100.0	38.4
bis(chloromethyl) Ether	100.0	36.1
1,2-Dibromo-3-chloropropane	100.0	38.4
3,3-Dimethyl Benzidine	100.0	38.4
Hexamethylphosphoramide	100.0	38.4
N-Nitrosodimethylamine	30.8	7.7
N-Nitroso-N-methyl Urea	30.8	7.7

11. The permittee shall maintain records and WMDS sheets which demonstrate compliance with the formulation limits set in Plantwide Condition #10. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department upon request. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

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12. The waste materials processed at the bulk tank storage and processing shall not exceed the HAP content limits listed in the following table. Note that all HAPs not listed can be present at 100% concentrations without exceeding the ambient criteria at the property line. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

Component	Concentration %
Acrolein	9.0
Allyl Chloride	71.0
Benzotrichloride	13.2
1,3-Butadiene	51.7
Chloroacetic Acid	98.0
2-Chloro-1,3-Butadiene	74.0
Diethyl sulfate	51.0
1,2 Diphenyl hydrazine	63.0
1,2-Epoxybutane	13.2
Ethylene Dibromide	6.7
2,2,4 - Trimethyl Pentane	43.3

13. The permittee shall maintain records and WMDS sheets which demonstrate compliance with the formulation limits set in Plantwide Condition #12. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department upon request. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

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14. The waste materials processed at the kilns shall not exceed the metals feed limits, based on a 12-hour averaging period, listed in the following table. Pre-MACT is defined as all periods before the MACT EEE compliance date. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

Component	SN-01 Pre-MACT lbs/hour	SN-01 Post-MACT lbs/hour	SN-02 lbs/hour
Arsenic	14.70	42.00	0.91
Beryllium	0.32	10.44	0.06
Cadmium	5.50	5.50	0.34
Chromium	31.40	1000.00	1.33
Lead	91.80	91.80	6.97
Mercury	0.48	0.48	0.48

In the event that all the listed metals are not included in the feed stream, the permittee may increase the feed limits of the metals present using the following equation:

[Feed Rate As]
$$(0.714)$$
 + [Feed Rate Be] $(8.44E-04)$ + [Feed Rate Cd] (0.245) + [Feed Rate Cr] (0.0399) = 13.1

15. The permittee shall maintain records and WMDS sheets which demonstrate compliance with the formulation limits set in Plantwide Condition #14. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

Divert Stack Events

- Opening of any of the divert stack(s) while uncombusted waste material is contained in the kiln(s) shall constitute an operational divert stack event. [§19.705 of Regulation #19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]
- 17. No divert stack shall be opened during an operational divert stack even without first stopping the waste feed and halting the kiln(s) rotation. No waste feed shall be introduced into the kiln without first closing the divert stack(s). [§19.705 of Regulation #19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

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18. Within one hour of an operational divert stack event, the permittee shall notify the on-site inspector. If the on-site inspector is unavailable, the permittee shall note the time of the notification attempt in the operation log for the unit. [§19.705 of Regulation #19 and 40 CFR Part 52, Subpart E]

- 19. The permittee is limited to twelve operational divert stack events per year, and shall not exceed three divert stack events during any rolling 30 day period. [§19.705 of Regulation #19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]
- 20. The permittee shall maintain records which demonstrate compliance with the limit set in Plantwide Condition #19. These records may be used by the Department for enforcement purposes. Records shall be updated during each event, shall be kept on site, and shall be provided to Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]
- 21. Within 5 working days of the operational divert stack event, the permittee shall submit to the Department a written report detailing the cause(s) of the event, the duration of the event, actions taken during the event, and actions taken to correct the cause(s). [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]
- Opening of any of the divert stack(s) while uncombusted waste material is NOT contained in the kiln(s) shall constitute a maintenance divert stack event and not be subject to Plant Wide Conditions #16 through #21. [§19.705 of Regulation #19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]
- 23. Prior to opening the divert stacks for a maintenance divert stack event, the permittee shall: [§19.705 of Regulation #19, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52 Subpart E]
 - 1. Use natural gas as the sole source of fuel for one hour prior to opening the stack(s),
 - 2. Activate steam jets in the vent for 15 minutes prior to opening the stack(s) vent lid,
 - 3. Pull particles through the scrubber system for 15 minutes while it is still in operation by partially opening the stack(s) vent lid while under draft from the main jet,
 - 4. Not allow combustion (including natural gas combustion) to take place in the kilns or TOU while the vent lid is open, and
 - 5. Maintain adequate thermal control during maintenance operations by utilizing low velocity steam or air jets in the divert stacks.

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24. The permittee shall maintain records which demonstrate compliance with the limits set in Plantwide Condition #23. These records may be used by the Department for enforcement purposes. Records shall be updated during each event, shall be kept on site, and shall be provided to Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

40 CFR 60, Subpart Dc

- 25. This facility is considered an affected source and is subject, but not limited to, the following requirements on all boilers in operation at this facility. [§19.304 of Regulation #19 and 40 CFR 60, Subpart Dc Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units]
- 26. The permittee shall submit notification of the date of construction, anticipated startup, and actual startup. This notification will also include the designed heat input capacity of the fuel to be combusted. [§19.304 of Regulation #19 and 40 CFR 60.48c(a)(1)]
- 27. The permittee shall record and maintain records of the amounts of each fuel combusted on a monthly basis. [§19.304 of Regulation #19 and 40 CFR 60.48c(g)]

40 CFR 61, Subpart C

- 28. This facility is considered an affected source and is subject, but not limited to, the following requirements. [§19.304 of Regulation #19 and 40 CFR 61, Subpart C National Emission Standard for Beryllium]
- 29. The permittee shall not emit to the atmosphere greater than 10 grams of beryllium over a 24-hour period. [§19.304 of Regulation #19 and 40 CFR 61.32(a)]
- 30. Within 90 days of startup of the new APC system, the permittee shall test SN-01 and SN-02 according to Method 104 of Appendix B of this Subpart. [§19.304 of Regulation #19 and 40 CFR 61.33(a)]
- 31. The permittee shall notify the Department at least 30 days prior to an emission test. [§19.304 of Regulation #19 and 40 CFR 61.22(b)]
- 32. The permittee shall take samples over such a period or periods as are necessary to accurately determine the maximum emissions which will occur in any 24-hour period. [§19.304 of Regulation #19 and 40 CFR 61.33(c)]
- 33. The permittee shall analyze all samples and beryllium emissions shall be determined within 30 days after the source test. Test results will then be sent to the Department. [§19.304 of Regulation #19 and 40 CFR 61.33(d)]

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40 CFR 61, Subpart E

- 34. This facility is considered an affected source and is subject, but not limited to, the following requirements. [§19.304 of Regulation #19 and 40 CFR 61, Subpart E National Emission Standards for Mercury]
- 35. The permittee shall not emit to the atmosphere greater than 3200 grams of mercury per 24-hour period. [§19.304 of Regulation #19 and 40 CFR 61.52(b)]
- 36. Within 90 days of startup of the new APC system, the permittee shall test SN-01 and SN-02 for mercury emissions using Method 101A in Appendix B of this subpart. [§19.304 of Regulation #19 and 40 CFR 61.53(d)(2)]
- 37. The permittee shall notify the Department at least 30 days prior to an emission test. [§19.304 of Regulation #19 and 40 CFR 61.53(d)(3)]
- 38. The permittee shall take samples over such a period or periods as are necessary to accurately determine the maximum emissions which will occur in any 24-hour period. [§19.304 of Regulation #19 and 40 CFR 61.53(d)(4)]
- 39. The permittee shall analyze all samples and mercury emissions shall be determined within 30 days after the source test. Test results will then be sent to the Department. [§19.304 of Regulation #19 and 40 CFR 61.53(d)(5)]
- 40. The permittee is required to monitor mercury emissions in accordance with this section if the mercury emissions are greater than 1,600 grams per 24-hour period. [§19.304 of Regulation #19 and 40 CFR 61.55(a)]

40 CFR 61, Subpart FF

- 41. This facility is considered an affected source and is subject, but not limited to, the following requirements. [§19.304 of Regulation 19 and 40 CFR 61, Subpart FF]
- 42. A treatment process or waste stream is in compliance with the requirements of this subpart and exempt from the requirements of paragraph (c) of this section because the facility is a hazardous waste incinerator for which the owner or operator has been issued a final permit under 40 CFR Part 270 and complies with the requirements of 40 CFR Part 264, Subpart O. [§19.304 of Regulation #19 and 40 CFR 61.348(d)]
- 43. The facility shall develop and implement a written startup, shutdown, and malfunction plan for those sources indicated as being subject to 40 CFR Part 63, Subpart FF. The plan shall include those items listed in 40 CFR 63.6(e)(3) et seq. The plan shall be maintained on site and be available to Department personnel upon request. [§19.304 of Regulation #19 and 40 CFR 63.6(e)(3)(i)]

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40 CFR 63, Subpart EEE

- 44. This facility is considered an affected source and is subject, but not limited to, the following requirements. These requirements shall become effective on the Compliance Date, which is currently September 30, 2004. [§19.304 of Regulation #19 and 40 CFR 63, Subpart EEE, National Emission Standards for Hazardous Air Pollutants From Hazardous Waste Combustors]
- 45. Pursuant to §63.1204(a), the permittee shall not discharge or cause combustion gases to be emitted into the atmosphere that contain:
 - A. For dioxins and furans:
 - 1. Emissions in excess of 0.20 ng TEQ/dscm corrected to 7 percent oxygen; or
 - 2. Emissions in excess of 0.40 ng TEQ/dscm corrected to 7 percent oxygen provided that the combustion gas temperature at the inlet to the initial particulate matter control device is 400 °F or lower based on the average of the test run average temperatures;
 - B. Mercury in excess of 130 μg/dscm corrected to 7 percent oxygen;
 - C. Lead and cadmium in excess of 240 μg/dscm, combined emissions, corrected to 7 percent oxygen;
 - D. Arsenic, beryllium, and chromium in excess of 97 μg/dscm, combined emissions, corrected to 7 percent oxygen;
 - E. Carbon monoxide and hydrocarbons either:
 - 1. Carbon monoxide in excess of 100 parts per million by volume, over an hourly rolling average or instantaneous reading (monitored continuously with a continuous emissions monitoring system), dry basis and corrected to 7 percent oxygen at any time during the destruction and removal efficiency (DRE) test runs or their equivalent as provided by §63.1206(b)(7); or
 - 2. Hydrocarbons in excess of 10 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen and reported as propane;
 - F. Hydrochloric acid and chlorine gas in excess of 77 ppm by volume, combined emissions, expressed as hydrochloric acid equivalents, dry basis, corrected to 7 percent oxygen; and
 - G. Particulate matter in excess of 34 mg/dscm corrected to 7 percent oxygen.

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46. The permittee must achieve a destruction and removal efficiency (DRE) of 99.99% for each principle organic hazardous constituent (POHC) designated under paragraph (c)(3) of this section. The permittee must calculate DRE for each POHC from the following equation: [§63.1203(c)(1), except as provided in paragraph (c)(2) of this section]

$$DRE = [1-(W_{out}/W_{in})] \times 100\%$$

Where:

W_{in} = mass feedrate of one POHC in a waste feedstream; and W_{out} = mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere

- 47. If the permittee burns dioxin-listed hazardous wastes FO20, FO21, FO22, FO23, FO26, or FO27 (see §261.31 of this chapter), the permittee must achieve a DRE of 99.9999% for each POHC that is designated under paragraph (c)(3) of this section. The permittee must demonstrate this DRE performance on POHCs that are more difficult to incinerate than tetro-, penta, and hexachlorodibenzo-p-dioxins and dibenzofurans. The equation in paragraph (c)(1) of this section shall be used to calculate DRE for each POHC. In addition, the permittee must notify the Administrator of the intent to burn hazardous wastes FO20, FO21, FO22, FO23, FO26, or FO27. [§63.1203(c)(2)]
- 47. The permittee must treat the POHCs in the waste feed that are specified under paragraph (c)(3)(ii) of this section to the extent required by paragraphs (c)(1) and (c)(2) of this section. [§63.1204(c)(3)(i)]
- 48. The permittee must specify one or more POHCs from the list of hazardous air pollutants established by 42 U.S.C. 7412(b)(1), excluding caprolactam (CAS number 105602) as provided by §63.60, for each waste to be burned. The permittee must base this specification on the degree of difficulty of incineration of the organic constituents in the waste and on their concentration or mass in the waste feed, considering the results of waste analyses or other data and information. [§63.1204(c)(3)(ii)]
- 49. The permittee must comply with the standards set forth in this subpart no later than September 30, 2004 unless the Administrator grants an extension of time under §63.6(i) or §63.1213. [§63.1206(a)(1)]

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50. The emission standards and operating requirements set forth in this subpart apply at all times except: [§63.1206(b)(1)]

- A. During startup, shutdown, and malfunction, provided that hazardous waste is not in the combustion chamber (i.e., the hazardous waste feed to the combustor has been cutoff for a period time not less than the hazardous waste residence time, excluding residues that may adhere to the combustion chamber surfaces after waste feed is stopped) during those periods of operation, as provided by paragraph (c)(2)(ii) of this section; and
- B. When hazardous waste is not in the combustion chamber (i.e., the hazardous waste feed to the combustor has been cutoff for a period time not less than the hazardous waste residence time, excluding residues that may adhere to the combustion chamber surfaces after waste feed is stopped), and the permittee has
 - 1. Submitted a written, one-time notice to the Administrator documenting compliance with all applicable requirements and standards promulgated under authority of the Clean Air Act, including sections 112 and 129; and
 - 2. Documented in the operating record that you are complying with such applicable requirements in lieu of the emission standards and operating requirements of this subpart.
- 51. The Administrator will determine compliance with the emission standards of this subpart as provided by 63.6(f)(2). Conducting performance testing under operating conditions representative of the extreme range of normal conditions is consistent with the requirements of 63.6(f)(2)(iii)(B) and 63.7(e)(1) to conduct performance testing under representative operating conditions. [§63.1206(b)(2)]
- 52. The Administrator will make a finding concerning compliance with the emission standards and other requirements of the subpart as provided by 63.6(f)(3). [§63.1206(b)(3)]
- 53. The Administrator may grant an extension of compliance with the emission standards of this subpart as provided by §63.6(i) and §63.1213. [§63.1206(b)(4)]

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- 54. If the permittee plans to change the design, operation, or maintenance practices of the source in a manner that may adversely affect compliance with any emission standard that is not monitored with a CEMS, the following must be followed: [§63.1206(b)(6)(iii)]
 - A. The permittee must notify the Administrator at least 60 days prior to the change, unless the circumstances that dictate such prior notice are documented. The notification must include:
 - 1. A description of the changes and which emission standards may be affected; and
 - 2. A comprehensive performance test schedule and test plan under the requirements of 63.1207(f) that will document compliance with the affected emission standard(s);
 - B. The permittee must conduct a comprehensive performance test under the requirements of 63.1207(f)(1) and (g)(1) to document compliance with the affected emission standard(s) and establish operating parameter limits as required under 63.1209, and submit to the Administrator a Notification of Compliance under 63.1207(j) and 63.1210(d); and
 - C. 1. After the change and prior to submitting the notification of compliance, the permittee must not burn hazardous waste for more than a total of 720 hours and only for purposes of pretesting or comprehensive performance testing.
 - 2. The permittee may petition the Administrator to obtain written approval to burn hazardous waste in the interim prior to submitting a Notification of Compliance for purposes other than testing or pretesting. The permittee must specify operating requirements, including limits on operating parameters, that will demonstrate compliance with the emission standards of this subpart based on available information.
- 55. If the permittee determines that a change will not adversely affect compliance with the emission standards or operating requirements, the permittee must document the change in the operating record upon making such change. The permittee will revise as necessary the performance test plan, Documentation of Compliance, Notification of Compliance, and start-up, shutdown, and malfunction plan to reflect these changes. [§63.1206(b)(5)(ii)]
- 56. If a DRE test is acceptable as documentation of compliance with the DRE standard, the permittee may use the highest hourly rolling average hydrocarbon level achieved during those DRE test runs to document compliance with the hydrocarbon standard. And acceptable DRE test is a test that was used to support successful issuance or reissuance of an operating permit under part 270 of this chapter. [§63.1206(b)(6)(i)]

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57. If during the acceptable DRE test, the permittee did not obtain hydrocarbon emission data sufficient to document compliance with the hydrocarbon standard, the permittee must either: [§63.1206(b)(6)(ii)]

- A. Perform, as part of the performance test, an "equivalent DRE test" to document compliance with the hydrocarbon standard; or
- B. Perform a DRE test as part of the performance test.
- The permittee must document compliance with the DRE standard under 63.1203 through 63.1205 only once, provided that the permittee does not modify the source after the DRE test in a manner that could affect the ability of the source to achieve the DRE standard. [§63.1206(b)(7)(A)]
- 59. The permittee may use DRE testing for purposes of issuance or reissuance of a RCRA permit under part 270 of this chapter to document conformance with the DRE standard if the permittee has not modified the design or operation of the source since the DRE test. [§63.1206(b)(7)(B)]
- 60. For sources that feed hazardous waste at a location in the combustion system other than the normal flame zone, the permittee: [§63.1206(b)(7)(B)(ii)]
 - A. Must demonstrate compliance with the DRE standard during each comprehensive performance test; and
 - B. May use DRE testing performed after March 30, 1998 for purposes of issuance or reissuance of a RCRA permit under part 270 of this chapter to document conformance with the DRE standard in lieu of DRE testing during the initial comprehensive performance test.
- 61. For sources that do not use DRE testing performed prior to the compliance date to document conformance with the DRE standard, the permittee must perform DRE testing during the initial comprehensive performance test. [§63.1206(b)(7)(B)(iii)]
- Any particulate matter and opacity standards or any permit or other emissions operating parameter limits or conditions, including any limitation on workplace practices, that are applicable to hazardous waste combustors to insure compliance with any particulate matter or opacity standard of parts 60, 61, 63, 264, 265, and 266 of this chapter (i.e., any title 40 particulate or opacity standards) applicable to hazardous waste combustor do not apply while the permittee conducts particulate matter continuous emissions monitoring system (CEMS) correlation tests. [§63.1206(b)(8)(i) and (ii)]

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- 63. For provisions of this section to apply, the permittee must develop a particulate matter CEMS correlation test plan that includes the following information. This test plan may be included as part of the comprehensive performance test plan required under §\$63.1207(e) and (f): [\$63.1206(b)(8)(iii)(A) and (B)]
 - A. Number of test conditions and number of runs for each test condition;
 - B. Target particulate matter emission level for each test condition;
 - C. How you plan to modify operations to attain the desired particulate matter emission levels;
 - D. Anticipated normal emission levels; and
 - E. Submit the test plan to the Administrator for approval at least 90 calendar days before the correlation test is scheduled to be conducted.
- 64. If the Administrator fails to approve or disapprove the correlation test plan with the time period specified by §63.7(c)(3)(i), the plan is considered approved, unless the Administrator has requested additional information. [§63.1206(b)(8)(iv)]
- 65. The particulate matter and associated operating limits and conditions will not be waived for more than 96 hours, in the aggregate, for a correlation test, including all runs of all test conditions unless an extension to this limit has been granted prior to the occurrence. [§63.1206(b)(8)(v)]
- 66. The stack sampling team must be on-site and prepared to perform correlation testing no later than 24 hours after the permittee has modified operation to attain the desired particulate matter emissions concentrations; unless the permittee documents in the correlation test plan that a longer period of conditioning is appropriate. [§63.1206(b)(8)(vi)]
- 67. The permittee must return to operating conditions indicative of compliance with the applicable particulate matter and opacity standards as soon as possible after correlation testing is completed. [§63.1206(b)(8)(vii)]
- 68. The permittee must calculate the hazardous waste residence time and include the calculation in the performance test plan under §63.1207(f) and the operating record. The permittee must also provide the hazardous waste residence time in the Documentation of Compliance under §63,1211(d) and the Notification of Compliance under §63.1207(j) and 63.1210(d). [§63.1206(b)(11)]
- 69. The permittee must conduct a minimum of three runs of a performance test required under §63.1207 to document compliance with the emission standards of this subpart. [§63.1206(b)(12)(i)]

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- 70. The permittee must document compliance with the emission standards based on the arithmetic average of the emission results of each run, except that the permittee must document compliance with the destruction and removal efficiency standard for each run of the comprehensive performance test individually. [§63.1206(b)(12)(ii)]
- 71. The permittee may petition the Administrator for an alternative particulate matter standard of 68 mg/dscm, corrected to 7% oxygen, if the permittee meets the de minimis metals criteria of §63.1206(b)(14)(ii). [§63.1206(b)(14)(i)]
- 72. The alternative standard petition the permittee submits under §63.1206(b)(14)(i) must included data or information documenting that: [§63.1206(b)(14)(ii)]
 - A. The feedstreams do not contain detectable levels of antimony, cobalt, manganese, nickel, selenium, lead, cadmium, chromium, arsenic, and beryllium;
 - B. The combined uncontrolled lead, cadmium and selenium emissions, when assuming these metals are present in the feedstreams at on-half the detection limit, are below 240 µg/dscm, corrected to 7% oxygen; and
 - C. The combined uncontrolled antimony, cobalt, manganese, nickel, chromium, arsenic, and beryllium emissions, when assuming these metals are present in your feedstreams at one-half the detection limit, are below 97 μ g/dscm, corrected to 7% oxygen.
- 73. The permittee must sample and analyze the feedstreams at least annually to document that the permittee met the de minimis criteria in §63.1206(b)(14)(ii). [§63.1206(b)(14)(iii)]
- 74. The permittee must operate only under the operating requirements specified in the Documentation of Compliance under §63.1211(d) or the Notification of Compliance under §863.1207(j) and 63.1210(d), except during performance tests under approved test plans according to §63.1207(e), (f), and (g). [§63.1206(c)(1)(i)]
- 75. The Documentation of Compliance and the Notification of Compliance must contain operating requirements including, but not limited to, the operating requirements of this section and §63.1209. [§63.1206(c)(1)(ii)]
- 76. Failure to comply with the operating requirements is failure to ensure compliance with the emissions standards of this subpart. [§63.1206(c)(1)(iii)]
- 77. Operating requirements in the Notification of Compliance are applicable requirements for purposes of parts 70 and 71 of this chapter. [§63.1206(c)(1)(iv)]
- 78. The operating requirements specified in the Notification of Compliance will be incorporated in the Title V permit. [§63.1206(c)(1)(v)]

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79. Except as provided in by paragraph (c)(2)(ii) of this section, the permittee is subject to the startup, shutdown, and malfunction plan requirements of §63.6(e)(3). [§63.1206(c)(2)(i)]

- 80. Even if the permittee follows the startup and shutdown procedures and the corrective measures upon malfunction that are prescribed in the startup, shutdown, and malfunction plan, the emission standards and operating requirements of this subpart apply if hazardous waste is in the combustion chamber (i.e., if the permittee is feeding hazardous waste or if startup, shutdown, or a malfunction occurs before the hazardous waste residence time has transpired after hazardous waste cutoff). [§63.1206(c)(2)(ii)]
- 81. The permittee must identify in the plan the projected oxygen correction factor based on normal operations to use during periods of startup and shutdown. [§63.1206(c)(2)(iii)]
- 82. The permittee must record the plan in the operating record. [§63.1206(c)(2)(iv)]
- 83. Upon the compliance date, the permittee must operate the combustor with a functioning system that immediately and automatically cuts off the hazardous waste feed, except as provided by paragraph (c)(3)(viii) of this section, when the following conditions apply: [§63.1206(c)(3)(i)]
 - A. When operating parameter limits specified under §63.1209; an emission standard monitored by CEMS; and the allowable combustion chamber pressure;
 - B. When the span value of any CMS detector, except a CEMS, is met or exceeded;
 - C. Upon malfunction of a CMS monitoring an operating parameter limit specified under §63.1209 or an emission level; or
 - D. When any component of the automatic waste feed cutoff system fails.
- 84. During an automatic waste feed cutoff (AWFCO) the permittee must continue to duct combustion gases to the air pollution control system while hazardous waste remains in the combustion chamber. [§63.1206(c)(3)(ii)]
- 85. The permittee must continue to monitor during the cutoff the operating parameters for which limits are established under §63.1209 and the emissions required under that section to be monitored by a CEMS, and the permittee shall not restart the hazardous waste feed until the operating parameters and emission levels are within specified limits. [§63.1206(c)(3)(iii)]
- 86. If the AWFCO system fails to automatically and immediately cutoff the flow of hazardous waste upon exceedance of a parameter required to be interlocked with the AWFCO system under paragraph (c)(3)(i) of this section, the permittee has failed to comply with the AWFCO requirements of paragraph (c)(3) of this section. [§63.1206(c)(3)(iv)]

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- 87. If, after any AWFCO, there is an exceedance of any emission standard or operating requirement, irrespective of whether the exceedance occurred while hazardous waste remained in the combustion chamber, the permittee shall investigate the cause of the AWFCO, take appropriate corrective measures to minimize future AWFCOs and record the findings and corrective measures in the operating record. [§63.1206(c)(3)(v)]
- 88. For each set of 10 exceedances of an emissions standard or operating requirement while hazardous waste remains in the combustion chamber, excluding residues that may adhere to the combustion chamber surfaces after waste feed is stopped, during a 60-day block period, the permittee must submit to the Administrator a written report within 5 calendar days of the 10th exceedance documenting the exceedances and the results of the investigation and corrective measures taken. [§63.1206(c)(3)(vi)(A)]
- 89. On a case-by-case basis, the Administrator may require excessive exceedance reporting when fewer than 10 exceedances occur during a 60-day block period. [§63.1206(c)(3)(vi)(B)]
- 90. The AWFCO system and associated alarms must be tested at least weekly to verify operability, unless the permittee documents in the operating record that weekly inspections will unduly restrict or upset operations and that less frequent inspection will be adequate. At a minimum, the permittee must conduct operability testing at least monthly. The permittee must document and record in the operating record AWFCO operability test procedures and results. [§63.1206(c)(3)(vii)]
- 91. The permittee may ramp down the waste feedrate of pumpable hazardous waste over a period not to exceed one minute, except as provided by paragraph (c)(3)(viii)(B). If the permittee elects to ramp down the waste feed, the permittee must document ramp down procedures in the operating and maintenance plan. The procedure must specify that the ramp down begins immediately upon initiation of automatic waste feed cutoff and the procedures must prescribe a bona fide ramping down. If an emission standard or operating limit is exceeded during the ramp down, the permittee has failed to comply with the emission standards or operating requirements of this subpart. [§63.1206(c)(3)(viii)(A)]
- 92. If the automatic waste feed cutoff is triggered by an exceedance of any of the following operating limits, the permittee may not ramp down the waste feed cutoff: Minimum combustion temperature, maximum hazardous waste feedrate, or any hazardous waste firing system operating limits that may be established for the combustor. [§63.1206(c)(3)(vii)(B)]
- 93. The permittee is subject to the emergency safety vent (ESV) operating and reporting requirements set forth in this section. [§§63.1206(c)(4)(i through iv)]
- 94. The permittee is subject to the combustion system leak control system operating and reporting requirements set forth in this section. [§§63.1206(c)(5)(i through ii)]

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95. The permittee is subject to the operator training and certification standards set forth in this section. [$\S 63.1206(c)(6)(i \text{ through } v)$]

- 96. The permittee must prepare and at all times operate according to an operation and maintenance plan which complies with the requirements set forth in these sections. [§§63.1206(c)(7)(i)(A-D)]
- 97. The permittee must conduct performance testing in accordance with the applicable requirements contained in this section. [§§63.1207(a-n)]
- 98. The permittee must commence the initial comprehensive performance test not later than six months after the compliance date. [\$63.1207(c)(1)]
- 99. The permittee must conduct testing periodically as described in paragraphs (d)(1) through (3) of this section. The date of commencement of the initial comprehensive performance test is the basis for establishing the deadline to commence the initial confirmatory performance test and the next comprehensive performance test. The permittee may conduct performance testing at any time prior to the required date. The deadline for commencing subsequent confirmatory and comprehensive performance testing is based on the date of commencement of the previous comprehensive performance test. [§§63.1207(d)(1) through (3)]
 - A. The permittee must commence testing no later than 61 months after the date of commencing the previous comprehensive performance test.
 - B. The permittee must commence confirmatory performance testing no later than 31 months after the date of commencing the previous comprehensive performance test. To insure that the confirmatory test is conducted approximately midway between comprehensive performance tests, the Administrator will not approve a test plan that schedules testing within 18 months of commencing the previous comprehensive performance test.
 - C. The permittee must complete performance testing within 60 days after the date of commencement, unless the Administrator determines that a time extension is warranted based on documentation in writing of factors beyond the permittee's control that prevent testing from being completed within 60 days.
- 100. The permittee must submit to the Administrator a notification of intent to conduct a comprehensive performance test and CMS performance evaluation and a site specific test plan and CMS performance evaluation plan at least one year before the performance test and performance evaluation are scheduled to begin. This notification may be waived if the Administrator has not approved the test plan, or acted on the test plan. [§63.1207(e)(i)]

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- 101. The permittee must submit to the Administrator a notification of intent to conduct the comprehensive performance test at least 60 calendar days before the test is scheduled to begin. [§63.1207(e)(i)(B)]
- 102. The permittee must submit to the Administrator a notification of intent to conduct a confirmatory performance test and CMS performance evaluation and a test plan and CMS performance evaluation plan at least 60 calendar days before the performance test is scheduled to begin. [§63.1207(e)(ii)]
- 103. The permittee shall use the test methods contained in this section when determining compliance with the emissions standards of this subpart. [§§63.1208(a-b)]
- 104. The permittee is subject to the applicable monitoring requirements contained in these sections. [§§63.1209 (a-q)]
- 105. The permittee must use a CEMS to demonstrate and monitor compliance with the carbon monoxide and hydrocarbon standards under this subpart. The permittee must also use an oxygen CEMS to continuously correct the carbon monoxide and hydrocarbon levels to 7 percent oxygen. [§63.1209(a)(1)(i)]
- 106. The permittee must install, calibrate, maintain, and operate a particulate matter CEMS to demonstrate and monitor compliance with the particulate matter standards under this subpart. However, compliance with the requirements in their section to install, calibrate, maintain, and operate the PM CEMS is not required until such time that the Agency promulgates all performance specifications and operational requirements applicable to PM CEMS. [§63.1209(a)(1)(iii)]
- 107. The permittee must install, calibrate, maintain, and continuously operate the COMS and CEMS in compliance with the quality assurance procedures provided in the appendix to this subpart and Performance Specifications 1 (opacity), 4B (carbon monoxide and oxygen), and 8A (hydrocarbons) in Appendix B, Part 60 of this chapter. [§63.1209(a)(2)]
- 108. If a carbon monoxide CEMS is used, the permittee is subject to the provisions of this section if a carbon monoxide exceedance is detected. [§63.1209(a)]
- 109. If a hydrocarbon CEMS is used, the permittee is subject to the provisions of this section if a hydrocarbon exceedance is detected. [§63.1209(a)]
- 110. Prior to feeding the material, the permittee must obtain an analysis of each feedstream that is sufficient to document compliance with the applicable feedrate limits provided in this section. [§63.1209(c)(1)]
- 111. The permittee must develop and implement a feedstream analysis plan and record it in the operating record. [§63.1209(c)(2)]

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112. The permittee must submit the feedstream analysis plan to the Administrator for review and approval, if requested. [§63.1209(c)(3)]

- 113. To comply with the applicable feedrate limits of this section, the permittee must monitor and record the feedrates as follows: [§63.1209(c)(4)]
 - A. Determine and record the value of the parameter for each feedstream by sampling and analysis or other method;
 - B. Determine and record the mass or volume flowrate of each stream by a CMS. If the permittee determines flowrate of a feedstream by volume, the permittee must determine and record the density of the feedstream by sampling and analysis(unless the permittee reports the constituent concentration in units of weight per volume); and
 - C. Calculate and record the mass feedrate of the parameter per unit time.
- 114. The requirements of §§63.8(d) (Quality control program) and (e) (Performance evaluation of continuous monitoring systems) apply, except that the permittee must conduct performance evaluations components of the CMS under the frequency and procedures (for example, submittal of performance evaluation test plan for review and approval) applicable to performance tests as provided by §63.1207. [§63.1209(d)(1)]
- 115. To remain in compliance with the destruction and removal efficiency (DRE) standards, the permittee must establish operating limits during the comprehensive performance test (or during a previous DRE test under provisions of §63.1206(b)(7)) for the following parameters, unless the limits are based on manufacturer specifications and comply with those limits at all times that hazardous waste remains in the combustion chamber. [§63.1209(j)]
- 116. The permittee must measure the temperature of each combustion chamber at locations that best represents, as practicable, the bulk gas temperature in the combustion zone. The permittee must document the temperature measurement location in the test plan submitted under §63.1207(e). [§63.1209(j)(1)(i)]
- 117. As an indicator of gas residence time in the control device, the permittee must establish and comply with a limit on the maximum flue gas flowrate, the maximum production rate, or another parameter that is documented in the site-specific test plan as an appropriate surrogate for gas residence time, as the average of the maximum hourly rolling averages for each run. [§63.1209(j)(2)(i)]
- 118. The permittee must establish limits on the total hazardous waste feedrate for each location where hazardous waste is fed. [§63.1209(j)(3)(i)]
- 119. The permittee must specify operating parameters and limits to insure that good operation of each hazardous waste firing system is maintained. [§63.1209(j)(4)]

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- 120. The permittee must comply with the dioxin and furans emission standard by establishing and complying with the following operating parameter limits. You must base the limits on operations during the comprehensive performance test, unless the limits are based on manufacturer specifications. [§63.1209(k)]
- 121. The permittee must establish a limit on the maximum temperature of the gas at the inlet to the device on an hourly rolling average. The permittee must establish the hourly rolling average limit as the average of the test run averages. [§63.1209(k)(1)(i)]
- 122. The permittee must measure the temperature of each combustion chamber at a location that best represents, as practicable, the bulk gas temperature in the combustion zone. The permittee must document the temperature measurement location in the test plan. [§63.1209(k)(2)(i)]
- As an indicator of gas residence time in the control device, the permittee must establish and comply with a limit on the maximum flue gas flowrate, the maximum production rate, or another parameter which is an appropriate surrogate for residence time. [§63.1209(k)(3)(i)]
- 124. The permittee must establish limits on the maximum total (pumpable and nonpumpable) waste feedrate for each location where waste is fed. [§63.1209(k)(4)(i)]
- 125. If the combustor is equipped with an activated carbon injection system or a carbon bed system, it is subject to the provisions of this section. [§63.1209(k)(5)]
- 126. If the combustor is equipped with an activated carbon injection system, it is subject to the provisions of this section. [§63.1209(k)(6)]
- 127. If the combustor is equipped with a carbon bed system, it is subject to the provisions of this section. [§63.1209(k)(7)]
- 128. If the combustor is equipped with a catalytic oxidizer, it is subject to the provisions of this section. [§63.1209(k)(8)]
- 129. If the combustion system is equipped with a dioxin/furan inhibitor, it is subject to the provisions of this section. [§63.1209(k)(9)]
- 130. The permittee must comply with the mercury emission standard by establishing and complying with the operating parameter limits found in this section. [§63.1209(l)]
- 131. The permittee must comply with the particulate matter emission standard by establishing and complying with the operating parameter limits found in §63.1209(m) of this subpart. [§63.1209(m)]

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- 132. If the combustor is equipped with a baghouse, the permittee must establish a limit on the minimum pressure drop and the maximum pressure drop across each baghouse cell based on manufacturer's specifications. The permittee must comply with the limit on an hourly rolling average. [§63.1209(m)(1)(ii)]
- 133. The permittee must establish a maximum ash feedrate limit. [§63.1209(m)(3)]
- 134. The permittee must comply with the semivolatile metal (cadmium and lead) and low volatile metal (arsenic, beryllium, and chromium) emission standards by establishing and complying with the following operating parameter limits. [§63.1209(n)]
- 135. The permittee must establish a limit on the maximum inlet temperature to the primary dry metals emissions control device on an hourly rolling basis as the average of the test run averages. [§63.1209(n)(1)]
- 136. The permittee must establish feedrate limits for semivolatile metals and low volatile metals. [§63.1209(n)(2)(i)]
- 137. The permittee must establish operating parameter limits on the particulate matter control device as specified by paragraph §63.1209(m)(1). [§63.1209(n)(3)]
- 138. The permittee must establish a limit for the feedrate of total chlorine and chloride in all feedstreams. [§63.1209(n)(4)]
- 139. The permittee must comply with the hydrochloric acid and chlorine emission standards by establishing and complying with the operating parameter limits found in this subpart. [§63.1209(o)]
- 140. If the permittee complies with the requirements for combustion system leaks under §63.1206(c)(5) by maintaining combustion chamber zone pressure lower than ambient pressure, the permittee must monitor the pressure instantaneously and the automatic waste feed cutoff system must be engaged when negative pressure is not maintained. [§63.1209(p)]
- 141. The permittee shall submit all of the applicable notifications prior to the deadlines established in this subpart. [§63.1210(a)(1)]
- 142. The permittee must submit the required notifications outlined in this section to the Administrator in order to request or elect to comply with the alternative requirements contained in this subpart. [§63.1210(a)(2)]
- 143. Upon postmark of the Notification of Compliance, the operating parameter limits identified in the Notification of Compliance, as applicable, shall be complied with, the limits identified in the Document of Compliance or a previous Notification of Compliance are no longer applicable. [§63.1210(d)(2)]

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144. The permittee may request an extension of the compliance date to install pollution prevention or waste minimization controls provided that the conditions outlined in this section are met. [§63.1213]

Acid Rain (Title IV)

145. The Director prohibits the permittee to cause any emissions exceeding any allowances the source lawfully holds under Title IV of the Act or the regulations promulgated under the Act. No permit revision is required for increases in emissions allowed by allowances acquired pursuant to the acid rain program, if such increases do not require a permit revision under any other applicable requirement. This permit establishes no limit on the number of allowances held by the permittee. However, the source may not use allowances as a defense for noncompliance with any other applicable requirement of this permit or the Act. The permittee will account for any such allowance according to the procedures established in regulations promulgated under Title IV of the Act. [Regulation 26, §26.701 and 40 CFR 70.6(a)(4)]

Title VI Provisions

- 146. The permittee must comply with the standards for labeling of products using ozone-depleting substances. [40 CFR Part 82, Subpart E]
 - a. All containers containing a class I or class II substance stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced to interstate commerce pursuant to §82.106.
 - b. The placement of the required warning statement must comply with the requirements pursuant to §82.108.
 - c. The form of the label bearing the required warning must comply with the requirements pursuant to §82.110.
 - d. No person may modify, remove, or interfere with the required warning s tatement except as described in §82.112.
- 147. The permittee must comply with the standards for recycling and emissions reduction, except as provided for MVACs in Subpart B. [40 CFR Part 82, Subpart F]
 - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
 - c. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.

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- d. Persons disposing of small appliances, MVACs, and MVAC like appliances must comply with record keeping requirements pursuant to \$82.166. ("MVAC like appliance" as defined at \$82.152.)
- e. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to §82.156.
- f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 148. If the permittee manufactures, transforms, destroys, imports, or exports a class I or class II substance, the permittee is subject to all requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.
- 149. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.
 - The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term AMVAC@ as used in Subpart B does not include the air tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC 22 refrigerant.
- 150. The permittee can switch from any ozone depleting substance to any alternative listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, "Significant New Alternatives Policy Program".

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Permit Shield

151. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements, as of the date of permit issuance, included in and specifically identified in the following table of this condition. The permit specifically identifies the following as applicable requirements based upon the information submitted by the permittee in an application dated February, 2004.

Applicable Regulations

Source No.	Regulation	Description
Facility	Regulation #19	Regulations of the Arkansas Plan of Implementation for Air Pollution Control
Facility	Regulation #26	Regulations of the Arkansas Operating Air Permit Program
Facility	40 CFR 60 Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
SN-24 Tanks 1-11	40 CFR 60, Subpart Ka	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after May 19, 1978, and Prior to July 1984.
SN-24 Tanks 12-15 and 602-609	40 CFR 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 1984.
Facility	40 CFR 61 Subpart C	National Emission Standard for Beryllium.
Facility	40 CFR 61 Subpart E	National Emission Standard for Mercury.
Facility	40 CFR 61, Subpart FF	National Emission Standard for Benzene Waste Operations.
Facility	40 CFR 63, Subpart EEE	National Emission Standards for Hazardous Waste Incineration

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The permit specifically identifies the following as inapplicable based upon information submitted by the permittee in an application dated February, 2004.

Inapplicable Regulations

Source No.	Regulation	Description	Basis for Determination
Facility	40 CFR 60 Subpart E	Standards of Performance for Incinerators	As a hazardous waste incineration facility, the incinerators at this facility do not incinerate solid waste as defined in this subpart.
Facility	40 CFR 60 Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978.	No vessels were constructed, reconstructed, or modified within that time period.
Facility	40 CFR 52.21	Prevention of Significant Deterioration (PSD)	This facility has not undergone PSD review at this time.
Facility	40 CFR 64	Compliance Assurance Monitoring	This is the initial Title V permit for this facility

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SECTION VII: INSIGNIFICANT ACTIVITIES

The following sources are insignificant activities. Any activity that has a state or federal applicable requirement shall be considered a significant activity even if this activity meets the criteria of §304 of Regulation 26 or listed in the table below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated February, 2004.

Description	Category
SN-24 Stationary Diesel Engines	Group A, #1
5,000 Gallon Sulfuric Acid Storage Tank	Group A, #3
Lime Storage Silo for SN-01 Pollution Control Train	Group A, #13

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SECTION VIII: GENERAL PROVISIONS

- 1. Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute. [40 CFR 70.6(b)(2)]
- 2. This permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later. [40 CFR 70.6(a)(2) and §26.701(B) of Regulation #26]
- 3. The permittee must submit a complete application for permit renewal at least six (6) months before permit expiration. Permit expiration terminates the permittee's right to operate unless the permittee submitted a complete renewal application at least six (6) months before permit expiration. If the permittee submits a complete application, the existing permit will remain in effect until the Department takes final action on the renewal application. The Department will not necessarily notify the permittee when the permit renewal application is due. [§26.406 of Regulation #26]
- 4. Where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, et seq. (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, the permit incorporates both provisions into the permit, and the Director or the Administrator can enforce both provisions. [40 CFR 70.6(a)(1)(ii) and §26.701(A)(2) of Regulation #26]
- 5. The permittee must maintain the following records of monitoring information as required by this permit. [40 CFR 70.6(a)(3)(ii)(A) and §26.701(C)(2) of Regulation #26]
 - a. The date, place as defined in this permit, and time of sampling or measurements;
 - b. The date(s) analyses performed;
 - c. The company or entity performing the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of such analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.

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6. The permittee must retain the records of all required monitoring data and support information for at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [40 CFR 70.6(a)(3)(ii)(B) and §26.701(C)(2)(b) of Regulation #26]

7. The permittee must submit reports of all required monitoring every six (6) months. If permit establishes no other reporting period, the reporting period shall end on the last day of the anniversary month of the initial Title V permit. The report is due within thirty (30) days of the end of the reporting period. Although the reports are due every six months, each report shall contain a full year of data. The report must clearly identify all instances of deviations from permit requirements. A responsible official as defined in Regulation No. 26, §26.2 must certify all required reports. The permittee will send the reports to the address below: [40 C.F.R. 70.6(a)(3)(iii)(A) and §26.701(C)(3)(a) of Regulation #26]

Arkansas Department of Environmental Quality Air Division ATTN: Compliance Inspector Supervisor Post Office Box 8913 Little Rock, AR 72219

- 8. The permittee shall report to the Department all deviations from permit requirements, including those attributable to upset conditions as defined in the permit. The permittee shall make an initial report to the Department by the next business day after the discovery of the occurrence. The initial report may be made by telephone and shall include:
 - a. The facility name and location
 - b. The process unit or emission source deviating from the permit limit,
 - c. The permit limit, including the identification of pollutants, from which deviation occurs,
 - d. The date and time the deviation started,
 - e. The duration of the deviation,
 - f. The average emissions during the deviation,
 - g. The probable cause of such deviations,
 - h. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future, and
 - i. The name of the person submitting the report.

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The permittee shall make a full report in writing to the Department within five (5) business days of discovery of the occurrence. The report must include, in addition to the information required by the initial report, a schedule of actions taken or planned to eliminate future occurrences and/or to minimize the amount the permit's limits were exceeded and to reduce the length of time the limits were exceeded. The permittee may submit a full report in writing (by facsimile, overnight courier, or other means) by the next business day after discovery of the occurrence, and the report will serve as both the initial report and full report. [40 CFR 70.6(a)(3)(iii)(B), §26.701(C)(3)(b) of Regulation #26, §19.601 of Regulation #19, and §19.602 of Regulation #19]

- 9. If any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity will not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable. [40 CFR 70.6(a)(5), §26.701(E) of Regulation #26, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
- 10. The permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation 26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. §7401, et seq. and is grounds for enforcement action; for permit termination, revocation and reissuance, for permit modification; or for denial of a permit renewal application. [40 CFR 70.6(a)(6)(i) and §26.701(F)(1) of Regulation #26]
- 11. 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 to maintain compliance with the conditions of this permit. [40 CFR 70.6(a)(6)(ii) and §26.701(F)(2) of Regulation #26]
- 12. The Department may modify, revoke, reopen and reissue the permit or terminate the permit for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [40 CFR 70.6(a)(6)(iii) and §26.701(F)(3) of Regulation #26]
- 13. This permit does not convey any property rights of any sort, or any exclusive privilege. [40 CFR 70.6(a)(6)(iv) and §26.701(F)(4) of Regulation #26]
- 14. The permittee must furnish to the Director, within the time specified by the Director, any information that the Director 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 must also furnish to the Director copies of records required by the permit. For information the permittee claims confidentiality, the Department may require the permittee to furnish such records directly to the Director along with a claim of confidentiality. [40 CFR 70.6(a)(6)(v) and §26.701(F)(5) of Regulation #26]

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- 15. The permittee must pay all permit fees in accordance with the procedures established in Regulation 9. [40 CFR 70.6(a)(7) and §26.701(G) of Regulation #26]
- 16. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes provided for elsewhere in this permit. [40 CFR 70.6(a)(8) and §26.701(H) of Regulation #26]
- 17. If the permit allows different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the operational scenario. [40 CFR 70.6(a)(9)(i) and §26.701(I)(1) of Regulation #26]
- 18. The Administrator and citizens may enforce under the Act all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, unless the Department specifically designates terms and conditions of the permit as being federally unenforceable under the Act or under any of its applicable requirements. [40 CFR 70.6(b) and §26.702(A) and (B) of Regulation #26]
- 19. Any document (including reports) required by this permit must contain a certification by a responsible official as defined in Regulation 26, §26.2. [40 CFR 70.6(c)(1) and §26.703(A) of Regulation #26]
- 20. The permittee must allow an authorized representative of the Department, upon presentation of credentials, to perform the following: [40 CFR 70.6(c)(2) and §26.703(B) of Regulation #26]
 - Enter upon the permittee's premises where the permitted source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records required under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d. As authorized by the Act, sample or monitor at reasonable times substances or parameters for assuring compliance with this permit or applicable requirements.

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- 21. The permittee shall submit a compliance certification with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The permittee must submit the compliance certification annually within 30 days following the last day of the anniversary month of the initial Title V permit. The permittee must also submit the compliance certification to the Administrator as well as to the Department. All compliance certifications required by this permit must include the following: [40 CFR 70.6(c)(5) and §26.703(E)(3) of Regulation #26]
 - a. The identification of each term or condition of the permit that is the basis of the certification;
 - b. The compliance status;
 - c. Whether compliance was continuous or intermittent;
 - d. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit;
 - e. and Such other facts as the Department may require elsewhere in this permit or by §114(a)(3) and §504(b) of the Act.
- 22. Nothing in this permit will alter or affect the following: [§26.704(C) of Regulation #26] The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section; the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance; the applicable requirements of the acid rain program, consistent with §408(a) of the Act or, the ability of EPA to obtain information from a source pursuant to §114 of the Act.
- 23. This permit authorizes only those pollutant emitting activities addressed in this permit. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]













