

APPLICATION FOR PART 71 FEDERAL OPERATING PROGRAM NAVAJO NATION ENVIRONMENTAL PROTECTION AGENCY AIR QUALITY CONTROL PROGRAM / OPERATING PERMIT PROGRAM OPERATING AIR PERMIT APPLICATION FORM (4 NNR 11- 2H)



(Overnight Mail) RT 112 North Building #2427 Fort Defiance, AZ 86504 Telephone: (928) 729-4246 Facsimile: (928) 729-4323

SECTION 1 - GENERAL INFORMATION: (Section)¹

1. Company Name ²		_	2. Application Date:	
3. Company Mailing Address:			4. Phone:	
5. Owner's Name ³ :			6. Phone:	
7. Owner's Mailing Address:				
8. Plant or Facility Name ⁴ :			9. Phone:	
10. Plant Mailing Address:				
11. Plant Operator ⁵ :			12. Phone:	
13. Plant Operator Address:				
14. Responsible Official ⁶ :	Title:		15. Phone:	
16. Responsible Official Address:				
17. Person to Contact at Site ⁷ : 18	8. Title:		19. Phone:	
20. Company Air Permit Contact ⁸ :			21. Phone:	
22. Company's State of Incorporation or Registration to do Business	s:			
23. Company's Corporate or Partnership Relationship to any other	Air Quality H	Permittee ⁹ :		
24. Name of Parent Company ¹⁰ :				
25. Address of Parent Company:				
26. Names of Subsidiary Companies ¹¹ :				
27. Previous Air Permits Issued to this facility (Permit Numbers):			28. Other Air Perr	nits Issued to this
Applicant (Permit Numbers):				
29. Reason this source must have a Part 71 Program operating perm	nit ¹² :			
30. This Operating Permit Application is for (check one): New	w Permit;	Permit Renewal;	Minor Modification;	Significant Modification.
If this Application is for Permit Renewal or Modification give: Curr	rent Operatin	g Permit No.	; Expiration	Date
31. Is this a permanent source? ¹³ : Yes No. If	No, how long	will this site be occupie	d?	

OPERATING AIR PERMIT APPLICATION FORM REV 0.1 (2008)

32. Is this a	a portable	source? ¹⁴ :	Yes	No			
32A. I	f yes, provi	ide identifying nu	mbers (Example: s	source unit num	bers, equipment serial nu	mbers, etc):	
32B. If	f yes, date	of anticipated relo	cation:		32C. If yes, date of antic	cipated startup:	
33. Plant C III-§ <i>301</i>)	Operationa	l Periods: (Subpa	ragraph D(5)(f) of	4NNR11-2H-Su	ıbpart		
33A. Sj	pecify stan	dard operational	periods:				
	hours day,	per	am to	<u>pm,</u>	days per week,	weeks per month,	months per year.
33B. Sj	pecify max	imum operationa	l periods:				
	hours day,	per	am to	<u>pm,</u>	days per week,	weeks per month,	months per year.
33C. M	Iax Opera	tional Hours in a `	Year				
34. Descrit	be briefly t	ype of plant and r	ature of process(e	s) and products	15:		
_							
Plant I	Primary SI	C code ¹⁶ :			Plant Second	lary SIC code ¹⁷ :	
35. Descrit	be briefly a	ny process(es) or	products associate	ed with any alter	rnative operating scenario	s described in this application	on ¹⁸ :
	•	• • · /		•		••	
					<pre>/ \</pre>		
Plant I	Primary ar	a Secondary SIC	codes for this alte	rnative process	(es):		
36. Plant's	Maximum	i Allowable Capac	city (Specify Units))-:			
Hourly	y:		D	; Daily:		; Annual:	
37. Plant L	Location ²⁰ :						
37A. C	County:		37B. Direction	and distance fr	com nearest town:		
37C. R	lange:	Tow	nship:	Sectio	n: 37D. Lati	itude: L	ongitude:
37E. U	TM Zone:		UTMH:	UT	MV:		
38. Plant E	Elevation		Feet above mean	sea level			
39. Owners	ship of La	nd at Plant site (P	rivate, State, Fede	ral, etc.):			
NOTE: Th	ne plant sit	e is on Navajo Nat	ion land, contact (the Air and Tox	ics Sections, Operating Ai	r permitting staff for assista	nce.
40. Distanc	ce, in mete	rs, of plant site to	nearest residence,	school or occup	bied structure ²¹ :		
41. Is U.S.(G.S. quadr	angular map (or o	equivalent) attach	ed with Plant lo	cation marked? ²² :	Yes, No.	
42. Identify	y all Class	1 areas, Indian L	ands and neighbor	ring states that a	are within 50 miles of the f	acility, and give their radial	distances
in miles:							

SECTION 2A - RAW MATERIALS PROCESSED²³: (Paragraph 4 of Subsection D of 4NNR11-2H-Subpart III §301) (Complete only if needed to determine emissions or if an applicable requirement exists for materials processed)

T T •/		C ::: 26	G 1 ¹ / ₂ ⁷	
Unit	Material	Composition ⁻⁵	Condition ²	Quantity Used ⁻
No. ²⁴				(Specify Units)
110				(speeny emis)

SECTION 2B - MATERIALS PRODUCED: (Paragraph 4 of Subsection D of 4NNR11-2H-Subpart III §301)

(Complete only if needed to determine emissions or if an applicable requirement exists for materials produced)

(Use additional sheets if necessary)

	40	1	1	
Unit	Material ²⁹	Composition	Condition	Production Rates
No		•		(Specify Unite)
INO.				(Specify Units)

SECTION 3A - LIQUID STORAGE TANKS - MATERIAL DATA³⁰: (Paragraphs 5 and 6 of Subsection D of 4NNR11-2H-Subpart III §301) (Complete asterisk * columns only if the tank has an applicable requirement or if necessary to calculate emissions)

* * * * * Vapor Maximum * Average **True Vapor** True Vapor Liquid Molecular Storage Storage Tank No. ³¹ Liquid Stored ³² Liquid Composition ³³ Density Weight Temp., T_{av} Pressure at Temp., T_{max} Pressure at (lb/lb-mole) (°F) (lb/gal) (°F) T_{av} (psia) T_{max} (psia)

SECTION 3B - LIQUID STORAGE TANKS - TANK DATA: (Paragraphs 5 and 6 Subsection D of 4NNR11-2H-Subpart III §301) (Complete asterisk * columns only if the tank has an applicable requirement or if necessary to calculate emissions)

` I		5	11	1	2		(Use additional sheets if necessary)			
Tank No. ³⁴	Date Installed/ Modified ³⁵	Capacity (gal)	* Tank Diameter (ft)	* Roof Type ³⁶	* Seal Type ³⁷	* Vapor Space Height (ft) ³⁸	* Roof/ Shell Color ³⁹	* Paint Cond- ition ⁴⁰	* Annual Throughput (gal/yr) ⁴¹	* Turnovers per Year ⁴²

SECTION 4A - SOLID MATERIAL STORAGE - MATERIAL DATA⁴³: (Paragraph 5.e of Subsection D of 4NNR11-2H-Subpart III §301) (Complete asterisk * columns only if necessary to calculate emissions or if there is an applicable requirement for material storage)

Storage Unit No. ⁴⁴	Storage Material Name	* Emission Unit(s), Process or Operation Served ⁴⁵	Storage Type ⁴⁶	Storage Material Composition ⁴⁷	* Date Installed or Modified

SECTION 4B - SOLID MATERIAL STORAGE - STORAGE DATA⁴⁸: (Paragraph 5.e of Subsection D of 4NNR11-2H-Subpart III §301) (Complete asterisk * columns only if necessary to calculate emissions or if there is an applicable requirement for material handling)

	Transfer or Tra	nsport Method ⁵⁰	* Maximum Hourly	* Annual	
Storage Unit No. ⁴⁹	Incoming	Outgoing	Throughput (specify units)	Throughput (specify units)	Dust Control Method (During Storage and Transfer) ⁵¹
			1		

SECTION 5 - FUEL USEAGE AND FUEL DATA⁵²: (Paragraph 5.e of Subsection D of 4NNR11-2H-Subpart III §301) (Complete asterisk * column only if needed to determine or regulate any emissions or if there is an applicable requirement for the fuel)

Emission Unit	Type of	Equipment Manufacturer	Equipment Rated Capacity ⁵⁵	* FUEL DATA ⁵⁶					
No. ⁵³	Equipment ⁵⁴	and Model No.	Max Design / Actual Site (specify units)	Fuel Type ⁵⁷	Amount Per Year ⁵⁸ (specify units)	Lower Heating Value ⁵⁹ (specify units)	% of Sulfur ⁶⁰	% of Ash ⁶¹	
			max				max.	max.	
			site				ave.	ave.	
			max				max.	max.	
			site				ave.	ave.	
			max				max.	max.	
			site				ave.	ave.	
			max				max.	max.	
			site				ave.	ave.	
			max				max.	max.	
			site				ave.	ave.	
			max				max.	max.	
			site				ave.	ave.	
			max				max.	max.	
			site				ave.	ave.	
			max				max.	max.	
			site				ave.	ave.	
			max				max.	max.	
			site				ave.	ave.	

SECTION 6 - AIR POLLUTION UNITS and CONTROL EQUIPMENT DATA ⁶²: (Paragraphs 5.f and 7.a of Subsection D of 4NNR11-2H-Subpart III §301) (List all Air pollution units of plant, including the units listed in Sections 3 thru 5)

				(Use additional sheets if necessar						
Emission	Process	Is Air Pollution Po Process Control C	Air Pollution Control	AIR POI CONTROL DA	LLUTION EQUIPMENT ATA	AIR POI CONTROL I EFFICIEN	Applicable Requirements for this			
Unit No. ⁶³	Omit No.63 Operation 64 Equipment Installed (Yes/No) 65 Equipment No.66 Equipment Type 68		Equipment Type ⁶⁸	Manufacturer and Model No. ⁶⁹	% by Weight ⁷⁰	Method of Determination ⁷¹	Process and/or Control ⁶⁷			

SECTION 7 - AIR POLLUTION EMISSION RATES⁷²: (Paragraph 5.d of Subsection D of 4NNR11-2H-Subpart III §301) (List all Air pollution units of plant, including the units listed in Sections 3 thru 6, and tank-flashing emissions estimates.)

Emi- ssion			ALLO	WABLE AI	IR POLLUT	CANT EMIS	SION RAT	ES (after co	ontrol equipr	nent) ⁷⁴			Emission Rate
Unit No. ⁷³	Pollutant-1	Pollutant-2	Pollutant-3	Pollutant-4	Pollutant-5	Pollutant-6	Pollutant-7	Pollutant-8	Pollutant-9	Pollutant-10	Pollutant-11	Pollutant-12	Units in
			·								 		pounds/hr
													tons/yr
													pounds/hr
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SECTION 8 - STACK PARAMETERS⁷⁵: (Paragraph 5.i of Subsection D of 4NNR11-2H-Subpart III §301) (Complete only if dispersion modeling is required or if there is an applicable requirement for stack parameters)

· •						(Use additional sh	neets if necessary)	
Stack	Emission	Stack	Stack	Stack	STACI	STACK EXIT GAS CONDITIONS ⁸¹		
No. ⁷⁶	Unit No. ⁷⁷	Height (ft) /*	Inside Exit Diameter (ft) ⁷⁹	Direction ⁸⁰	Temp. (°F)	Velocity (ft/sec) ⁸²	Moisture % by Vol	

SECTION 9 - COMPLIANCE MONITORING DEVICES AND EQUIPMENT⁸³: (Paragraph 5.f of Subsection D of 4NNR11-2H-Subpart III §301)

Monitor Unit No. ⁸⁴	Parameter To Be Monitored ⁸⁵	Pollutant To Be Monitored or Measured ⁸⁶	Type of Monitor or Instrument ⁸⁷	Monitor Manufacturer and Model Number	Range ⁸⁸	Sensitivity ⁸⁹	Accuracy ⁹⁰	Monitored Emission Unit No. ⁹¹	Location of Monitor ⁹²

SECTION 10 - STRATOSPHERIC OZONE PROTECTION PROGRAM (Title VI, Clean Air Act Amendments) Please answer the following questions to determine the applicability of 40 CFR 82, Subparts A through G, to your facility.

- 1. Does your facility have any air conditioners or refrigeration equipment that uses CFCs, HCFCs or other ozone-depleting substances? _____yes ____no
- 2. Does any air conditioner(s) or any piece(s) of refrigeration equipment contain a refrigeration charge greater than 50 lbs? ______ yes _____ no (If the answer is yes, describe what type of equipment and how many units are at the facility.)
- 3. Do your facility personnel maintain, service, repair, or dispose of any motor vehicle air conditioners (MVACs) or appliances ("appliance" and "MVAC" as defined at 82. 152)? yes ______no
- 4. Cite and describe which Title VI requirements are applicable to your facility (i.e. 40CFR Part 82, Subpart A through G.)_____

SECTION 11 - CERTIFICATION

I, (Company Name) and data submitted in the best of my personal	his application pack knowledge and prof	age are as con fessional expe	, hereby cert , that nplete, true and accurate tise and experience.	ify on behalf of the information as possible, to
Signed this	_day of	, 20	, upon my oath of affirr	nation, before a
SIGNATURE (Respon	sible Company Offic	cial) DAT	E	
PRINTED NAME	Title		Company	
Subscribed and sworn	to before me on this	day o	f, 20	<u> </u>
My authorization as a l, 20	Notary of the State of	f	expires on the	day of
NOTARY'S SIGNATU	JRE	DATE		
NOTARY'S PRINTED	NAME	NOTARY S	EAL	

FOOTNOTES FOR NNEPA OPERATING AIR PERMIT APPLICATION FORMS

Do not send Footnotes with application submission.

¹ Section 1--_General Information

If additional space is required for any item, please use a separate sheet of paper and clearly identify to which item the information pertains. The electronic form will expand and the pages will be renumber as needed.

² "Company" means the name by which this organization conducts business in Navajo Nation Tribal Land.

³ "Owner" as defined in Paragraph 2 of Subsection D of 4NNR11-2H-Subpart III §301.

⁴ "Plant or Facility Name" means the name by which the company identifies this particular facility.

⁵ "Operator of Plant" as defined in Paragraph 2 of Subsection D of 4NNR11-2H-Subpart III §301.

⁶ "Responsible Official" as defined in Paragraph 2 of Subsection D of 4NNR11-2H-Subpart III §301.

⁷ "Person to contact at the site" means the person who is knowledgeable about the permit and who is normally present at the plant site during normal business hours. The NNEPA, Air and Toxics Section will retain this person's name for future contacts concerning this facility.

⁸ "Company Air Permit Contact" means a company official, or an individual who is authorized by the company, who knows about the air quality permit applicability and requirements including the air pollution sources and emissions estimation calculations, etc.

⁹ Please list the names of any companies that have operating (4NNR11-2H) permits and with whom the applicant for this permit has a corporate or partnership relationship.

¹⁰ "Parent Company" means the primary name of the organization that owns the company to be permitted wholly or in part.

¹¹ "Subsidiary Companies" means organizations, branches, divisions or subsidiaries, which are owned, wholly or in part, by the company to be permitted.

¹² Specify why this source must have an 4NNR11-2H operating permit--is it: a major source; subject to section 111 or section 112 of the federal Clean Air Act; an acid rain source; or in a source category designated by the Administrator. See "Who Must Apply" section of this application package and 4NNR11-2H-Subpart III §201for details.

¹³ "Permanent Source" means a source, which operates at least 12 months or more at this site.

¹⁴ See 4NNR11-2H for the <u>definition</u> of this term. For portable or moveable equipment include serial numbers or other positive means of identification of that particular set of equipment. Include the Standard Industrial Classification (SIC) codes for the type of plant. 4NNR11-2H permits may be obtained for portable operations such as asphalt concrete plants, portable internal combustion or turbine engines, rock crushers and other types of portable equipment. There will be procedures placed in the permit relating to notification of the Air and Toxics Section, Air Permit Department by the permittee prior to relocation.

¹⁵ Describe the primary products of this plant; the raw materials used; and the process(es) used to transform the raw materials into the final product.

¹⁶ SIC codes are Standard Industrial Classification codes. Give SIC code for plant primary process.

¹⁷ SIC codes are Standard Industrial Classification codes. Give SIC code for plant secondary process (if any).

¹⁸ Alternative operating scenarios are changes in process, materials, operations or products. See Paragraph 5(j), (k) of Subsection D of 4NNR11-2H-Subpart III §301 for more information.

¹⁹ Plant's maximum allowable capacity is the greatest allowable production rate of the plant. The hourly or daily capacity as well as the annual capacity should be stated. How these numbers were determined should also be stated. <u>Example</u>: they might be based on the federally enforceable limits placed on the plant by the conditions of this permit and its Part 71 permit, the design capacity of the plant operating at 8760 hours per year, or a specified applicable requirement. The plant capacity will be a condition of the permit and used to evaluate future modifications to the permit and to determine the emissions fee.

²⁰ Provide either the UTM coordinates or the longitude and latitude for your facility. It is also acceptable to provide both.

²¹ State the distance, in meters, from the nearest plant boundary to the closet residence, school or other occupied structure. The plant boundary is the point at which public access to the plant is restricted. This restriction may be a fence, a wall etc.

²² Paragraph 4 of Subsection D of 4NNR11-2H-Subpart III §301 requires that this application be accompanied by a U.S. Dept. of the Interior Geological Survey topographic quadrangle map or equivalent showing the exact location of the plant site or modification. A 7.5-minute topographic quadrangle map is suggested.

²³ <u>Sections 2A and 2B: Raw Materials Processed and Materials Produced:</u> This section addresses any feed stocks or raw materials used in the plant process, and materials or products (not including solid or liquid waste products) that are generated. As an example, sour natural gas is the raw material and sweet pipeline quality gas and natural gas liquids are the products. Some unit numbers will correspond to process equipment, as for example where a stream is "refined", such as sour gas to sweet gas, or rock crushing with rock aggregate feed and various products are produced in stages (crushers, screens). Calculations made to determine the values shown on the form are to be shown and referenced in Package Element-6 (Emissions Calculations).

²⁴ (These apply to both 2A and 2B) Corresponding to emissions, process or operational unit numbers as shown in Package Element-S (Process Flow Sheets).

²⁵ What are the raw materials of this plant? <u>Example</u>: crude oil, sour gas, raw ore, etc.

²⁶ List each component with weight percentages and chemical compositions (if known), or attach separate analysis sheet.

²⁷ Provide typical particle size distribution for aggregates, pumice dust, etc. and average moisture content. State how moisture content was determined.

²⁸ Barrels per day, thousands of standard cubic feet per day, tons per hour, etc. Reference process flow sheets requires in Package Element-S, including material balances. For emission purposes, maximum values are more appropriate than average quantities.

²⁹ What are the finished products of this plant? <u>Example</u>: gasoline, diesel fuel, sweet gas, etc.

³⁰ <u>Section 3A: Liquid Storage Tanks - Material Data:</u> This section is used to describe any liquid materials that are stored at the plant and are sources of gaseous emissions. This includes raw feed stocks, and intermediate and final product storage. If your plant has no tanks which to store petroleum based liquids, volatile organic compounds, or other toxic or hazardous materials, write "NA" on the top of the form. This information is requested for the calculation and characterization of fugitive emissions. EPA's reference AP-42 Section 12 lists reference data for liquid storage tanks. The emissions data for the tanks should be provided in Sections 6 and 7 of this application form.

³¹ The tank number to be assigned by applicant for each tank. Give a unique tank number for each tank. These are the same numbers as are used in Package Element-5 (Process Flow Sheets) to identify each tank.

³² Give the trade name or commonly used name for the liquid stored in the tanks. <u>Example</u>: Stoddard Solvent, fuel oil. If the tank is used to store more than one material, use a separate line for each material and provide all the requested date for each material.

³³ Identify each component (including sulfur) and give its weight percent. If space is insufficient, attach analysis sheet. The material name and tank number should be clearly identified on any attachments.

³⁴ <u>Section 3B: Liquid Storage Tanks - Tank Data</u> Use tank number(s) from Section 3A.

³⁵ Date (mo/yr) tank was originally installed or constructed. If the tank was later modified or reconstructed, provide the date this work was done and attach a separated description of the modifications or reconstruction.

³⁶ Use the following abbreviations: Fixed Roof--FX, Internal Floating Roof--IF, External Floating Roof--EF, Pressure--P.

³⁷ Select the appropriate number and letter from the following list that describes the tank and seal type (<u>Example:</u> "2b" indicates welded tank, liquid mounted resilient seal with weather shield);
<u>Note:</u> For pressure tanks, enter control pressure (in psia).

WELDED TANK SEALS

- 1. Mechanical shoe
- a. Primary only
- b. Shoe mounted secondary
- c. Rim mounted secondary
- 2. Liquid mounted resilienta. Primary onlyb. Weather shieldc. Rim mounted secondary
- 3. Vapor mounted resilient
- a. Primary only
- b. Weather shield
- c. Rim mounted secondary

RIVETED TANK

- 4. Mechanical shoe seal
 - a. Primary only
 - b. Shoe mounted secondary
 - c. Rim mounted secondary

³⁸ This applies to raised roof tanks only. Give the average distance from liquid surface to tank roof. For all other tanks, write "NA".

³⁹ Use the following abbreviations: White--WH, Aluminum (specular--AS, Aluminum (diffuse)--AD, Light Gray--LG, Medium Gray--MG, Black--BL, Other--OT.

⁴⁰ Describe the condition of the paint on the tank as either 'Good' or 'Poor'.

⁴¹ Describe the condition of the paint on the tank as either 'Good' or 'Poor'.

⁴² Turnover= annual throughput (gal) tank capacity (gal)

⁴³ Section 4A: Solid Material Storage- Material Data

This section is used to describe any solid stored material used in the plant process, which are sources of particulate emissions. This includes raw feed stocks, intermediate and final product storage. If there is no solid material storage at the plant, write "NA" at the top of the form. Emissions data for solid material that is stored on the plant site should be provided in Sections 6 and 7.

⁴⁴ Individual storage unit numbers are assigned by the applicant in Package Element-5 (process Flow Sheets). These

same unit numbers are used in this Section and in Sections 6 and 7 to identify the storage units.

⁴⁵ State which process, operation or emissions unit is served and whether transfer equipment is used. <u>Example:</u> open feed conveyor.

⁴⁶ Examples of storage type: silo, open pile, shed, enclosed building, enclosed weigh bin or surge bin.

⁴⁷ Give the chemical composition of the material being stored. If space is insufficient, attach analysis sheet. The material name and storage unit number should be identified clearly in any attachments.

⁴⁸ Section 4B: Solid Material Storage - Storage Data This section is used to describe the transfer of solid material in the facility process or operation, if emissions result.

⁴⁹ Use the same storage unit numbers in Section 4A.

⁵⁰ Examples of transfer or transport method:

Incoming: how material is loaded into the storage unit. Example: truck, rail car, front-end loader.

<u>Outgoing:</u> how material is moved from the storage area to the process area. <u>Example:</u> closed pneumatic feed, closed gravity feed, open gravity feed, enclosed screw conveyor, front end loader, open or enclosed belt conveyor, truck.

⁵¹ State what kinds of dust-control methods are used in the storage or transfer of material. <u>Example</u>: silo bin filters, telescoping stacker chutes, enclosures, dust pickup to baghouse etc. If the storage unit is equipped with a stack, and if dispersion modeling is necessary, provide the stack parameters in Section 8 (Stack Parameters).

⁵² <u>Section 5: Fuel Usage and Fuel Data</u> This section provides information on all the fuel usage for all process equipment at the facility. Flares and waste burners are not listed here unless supplemental fuel is used to sustain combustion. In that case, only the supplemental or auxiliary fuel data is given here.

A material balance for combustion within the plant is required to complete this Section and should be attached to this Section. Show calculations in Package Element -- 6.

Only equipment that uses fuel is listed in this section.

⁵³ Corresponding to emissions, process, or operational unit numbers as shown in Package Element --- 5 (Process Flow Sheets).

⁵⁴ State the type of equipment - e g. Boiler, diesel engine, furnace, gas engine, gas turbine, oven, space heater, etc.

⁵⁵ Provide the maximum nameplate rate and the actual site rate, if these rates are different, e.g. million btu/hr, HP etc. If these rates have been adjusted for altitude, this should be noted on the form. Use manufacturer's published derating procedures, and provide documentation.

⁵⁶ If auxiliary fuel or different fuel is used "on standby", the data for that fuel must also be provided.

⁵⁷ Type of Fuel - e.g. Pipeline quality natural gas, LPG; No. 1,2,4, or 6 fuel oil; refinery gas; coal; wood; etc.

⁵⁸ Use the following units depending on the fuel type: Million cubic feet of gas; gallons of fuel oil; pounds of LPG; etc. State what units you are using.

⁵⁹ Use the following units depending on the fuel type: Btu/standard cubic foot for gas, Btu/lb for solid fuel, or Btu/gallon for liquid fuel.

⁶⁰ State both maximum percentage by weight and average percentage by weight. Sulfur content is not required if

sweet pipeline quality natural gas is used as the fuel. Specify in "fuel type" that sweet pipeline quality gas is used and state specification under "sulfur". Provide fuel supplier specifications for sulfur content.

⁶¹ State both maximum percentage by weight and average percentage by weight. Ash content is not required if sweet pipeline quality natural gas is used as the fuel.

⁶² <u>Section 6: Air Pollution Units and Control Equipment Data:</u> Each piece of equipment in the facility that emits any type of air pollutant must be listed in this section. The type of air pollutants shall include all regulated air pollutants; all fugitive emissions; and any hazardous or toxic air contaminants emitted at the facility. Do not include equipment or emissions listed in the List of Insignificant Activities. Also list air pollution control equipment, waste abatement equipment, process control capture equipment. Give efficiency data and efficiency determination methods for all these units.

⁶³ Use the process or operation equipment unit numbers that were assigned to each piece of equipment in Package Element - 5 (Process Flow Sheets). For fugitive emissions, describe the source of the emissions. For liquid tank and solid material storage, use the tank or storage unit number.

⁶⁴ Give process or Operation of this Unit. <u>Example:</u> boiler, catalyst regeneration units, flare, furnace, gas engine, iron melting cupola, material dryer, process fugitive, silo, smelter furnace, solvent cleaner, storage tanks, etc.

⁶⁵ Indicate 'Yes' if air pollution control equipment is installed, and provide control information in the following columns, and give controlled/allowable emission rates in Section 7.

⁶⁶ Identify each air pollution control equipment with a number that corresponds to the identification in Package Element-5.

⁶⁷ Specify the requirement(s) that is (are) applicable to this process, operation or emission unit. 4NNR11-2H for list of applicable requirement references. <u>Example:</u> Paragraph x.x of Operating Permit Emission Fee; NSPS Subpart GG Paragraph x.x; Construction permits Permit Condition x.x; etc. Be as specific as possible. If there is insufficient room on the form, please attach a clearly identified additional sheet.

⁶⁸ Such as baghouse, cyclone separator, electrostatic precipitator, enclosures, scrubber, VOC incinerator, etc.

⁶⁹ Give air pollution control equipment manufacturer's name, model no., and serial no.

⁷⁰ Identify each pollutant by name which can be controlled by this control equipment, and give capture efficiency of this control equipment on each of these pollutants in % by weight.

⁷¹ Field test results, manufacturer's data etc. Specify how the quantity of emitted pollutant was determined: from actual measurement (specify equipment used) of emissions (preferred), process material balances, equipment manufacturer's information, EPA emission factor, or other source. Show the calculations used to obtain the emission rates as stated in Package Element-6 (Emissions Calculations).

 72 <u>Section 7: Air Pollution Emission Rates:</u> List all emissions units given in the Section 6. For all these units give air pollutant emissions that are to be allowed by the permit.

The allowable emissions are the emissions released to the atmosphere from each air pollution source (or unit). Provide emissions rates from air pollution control equipment, waste abatement equipment, process control capture equipment, and from uncontrolled processes, operations or activities. These emissions are: pollutants for which the source is major, regulated air pollutants, and any hazardous or toxic air contaminants emitted as part of plant processes. Emissions from flares, sulfur recovery units, VOC incinerators, and wood waste burners must also be listed. These emissions shall also include fugitive process emissions and other fugitive or indirect emissions resulting from activities of this facility. Example: fugitive dust from haul roads that are a part of a process such as crushing or mining operations. Do not include emissions from Insignificant Activity Units (see Package Element -

11). Calculations made to determine the values shown on the form are to be shown and referenced in Package Element-6 (Emissions Calculations).

Enter tank-flashing emissions data in section 7 with all supporting calculation in Element-6. The information provided to the Air and Toxics Section, Air Permitting Department shall include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., permit or major source (NSPS, PSD or Title V)), accuracy of the model. The input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis.

Sufficient information must be included for the department to evaluate, and verify, the process of operation, and emission rates for emission sources (or emission units), control equipment and stated control efficiencies of the control equipment involved. Include manufacturer's published emission data, control efficiency data, or test data in support of your calculations. Process flow sheets and other references are required, and attach any equipment layout and assembly drawings as necessary to describe all air pollution control equipment as stated in Package Element-5.

⁷³ List all emission units, including the units listed in Sections 3 thru 6. If multiple process units (with individual numbers) discharge to one control equipment unit, identify and group all those emission units on one line. For liquid tank and solid material storage, use the tank or storage unit number. Emissions from units that are alike or similar may be consolidated if there is no applicable requirement and emissions are calculated with the same emission factors.

⁷⁴ <u>Pollutant:</u> Identify each pollutant defined by EPA to be a regulated air pollutant that this source emits. Provide trade name or common name and chemical composition of the pollutant. <u>Example</u>: Particulate matter (PT), Particulate Matter under 10-micron size (PM-10), Particulate Matter under 2.5-micron size (PM-2.5), Sulfur Dioxide (SO2), Carbon Monoxide (CO), Volatile Organic Compounds (VOC), Hydrogen Sulfide (H2S), Nitrogen Oxides (NOx) (as nitrogen dioxide), etc. For Hazardous Air Pollutants (HAPS) provide CAS number also. "Allowable" values are based on maximum allowable production rates. List air pollutan, emissions rates in both pounds per hour and tons per year. Show any other emissions rates prescribed by applicable requirements. Yearly values are based on 8760 hours per year unless the applicant desires to restrict hours of operation as a permit condition. If the emission rate is limited by a federally enforceable applicable requirement, then provide the value of this rate.

⁷⁵ <u>Section 8: Stack Parameters:</u> This section must be completed only if air dispersion modeling is required or if there is an applicable requirement.

⁷⁶ Use stack number from Package Element-5 (Process Flow Sheets). If there is a release point with no stack, state the location of the release point.

⁷⁷ If one stack serves multiple processes, operations, or emissions units, provide unit numbers for all emissions units discharging to this stack.

⁷⁸ Height above ground of the stack exit or releases point.

⁷⁹ If stack is circular, give inside diameter at exit point in feet. If stack is not circular, provide actual exit dimensions.

⁸⁰ Give direction of the stack (vertical, horizontal, etc.). State whether rain cap is used.

⁸¹ If conditions are not measured at actual stack exit, specify location at which measurements are made.

⁸² Show calculations in sufficient detail to allow permit engineer to verify actual velocity values. These calculations should be shown in Package Element-6 and clearly identified

⁸³ <u>Section 9: Compliance Monitoring Devices and Equipment</u> Use this section to list all compliance monitoring devices and equipment used at the facility to verify emission rates and other permit terms and conditions. Use one line for each monitoring device and piece of equipment.

⁸⁴ List the unit number of the compliance-monitoring device as shown in Package Element-5 (Process Flow Sheets).

⁸⁵ This category addresses situations in which parametric monitoring devices measure substances or characteristics, such as fuel flow, product flow, pressures, temperatures, etc. that are shown to be indicative of pollutant emissions.

⁸⁶ Indicate pollutant of concern whose emissions are to be monitored.

⁸⁷ State the type of the monitoring device. <u>Example:</u> Ultra Violet Photometric Analyzer, NDIR Photometer, Opacity Meter, EPA sampling Train (specify the sampling method number) etc.

⁸⁸ Highest and Lowest value the instrument can read. Example: 0-1,000 ppm, 0-50 g/m3, 0-100% opacity, etc.

⁸⁹ Sensitivity of the monitoring instrument, the minimum value change the instrument is capable of measuring and reading out.

⁹⁰ Accuracy of the monitoring instrument, which closely represents the instrument's actual value (as a percentage).

⁹¹ Provide the unit number(s) (from Package Element-5 Process Flow sheets) of the emissions unit(s) being monitored by each device.

⁹² Describe the physical location of the monitoring device and the recording device. <u>Example:</u> Monitor is located in ductwork 50 feet upstream from stack; recorder is located in operating control room; etc.