



**DNREC – Air Quality Management Section  
Application to Construct, Operate, or Modify  
Stationary Sources**

**Selective Catalytic Reduction (SCR),  
Selective Non-Catalytic Reduction (SNCR),  
Non-Selective Catalytic Reduction (NSCR), and  
Ammonia Injection Application**

*If you are using this form electronically, press F1 at any time for help*

<u><b>General Information</b></u>	
1.	Facility Name: <b>Wolf Technology Center 1</b>
2.	Equipment ID Number: <b>OX1/SCR1 through OX10/SCR10</b>
3.	Manufacturer: <b>TBD</b>
4.	Model: <b>TBD</b>
5.	Serial Number: <b>TBD</b>
6.	Type: <input checked="" type="checkbox"/> Selective Catalytic Reduction <input type="checkbox"/> Selective Non-Catalytic Reduction <input type="checkbox"/> Non-Selective Catalytic Reduction <input checked="" type="checkbox"/> Ammonia Injection
<b>Attach the Manufacturer's Specification Sheet.</b>	

<u><b>Contaminant Information</b></u>			
7. Concentration of Each Contaminant in the Waste Gas and Removal Efficiency			
If more than five Contaminants are present, attach additional copies of this page as needed.			
	<u>Contaminant</u>	<u>CAS Number</u>	<u>Concentration in Waste Gas</u>
7.1.	<b>NOx (Natural Gas)</b>	<b>NA</b>	<b>2.0 (3-hr average) ppm</b>
7.2.			<b>% by Weight</b>
7.3.			<b>% by Weight</b>
7.4.			<b>% by Weight</b>
7.5.			<b>% by Weight</b>

<u><b>Gas Stream Information</b></u>	
8.	Maximum Inlet Volumetric Gas Flow Rate: <b>182,898 acfm at 993 °F</b>
9.	Maximum Outlet Volumetric Gas Flow Rate: <b>182,898 acfm at 993 °F</b>
10.	Pressure Drop: <b>&lt;1 inches water</b>

<u><b>Operational Information</b></u>	
11.	Design Operating Temperature: <b>600 to 750 °F</b>



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<u><b>Operational Information</b></u>	
12.	Ammonia/Urea Slip: <b>7 (3-hr average) ppm</b>
13.	Method of Determining Slip: <input type="checkbox"/> Continuous Emissions Monitor <input checked="" type="checkbox"/> Stack Test <input checked="" type="checkbox"/> Manufacturer's Specifications <input type="checkbox"/> Other (Specify):
14.	Describe the Operating Conditions that are Monitored to Determine the Reducing Agent Injection Rate: <b>The SCR will include controls and alarms to provide adequate ammonia flow to control amount of ammonia injected into the flue gas</b>
15.	Describe the Process Controls for Proper Mixing of the Reducing Agent in the Gas Stream: <b>Aqueous ammonia will be stored in a tank onsite. The ammonia will be injected into the HRSG where NOx is reduced to N and water.</b>
16.	Operating Temperature Range for Catalyst: From <b>TBD °F</b> To <b>TBD °F</b>
17.	Describe the Oxidation Catalyst Used: <b>TBD</b>
18.	Design Service Life of Catalyst: <b>typically &gt; 5 years</b>
19.	Describe Reducing Agent Used: <b>aqueous ammonia</b>
20.	Expected Usage Rate of Reducing Agent: <b>TBD</b>
21.	Expected Concentration of Reducing Agent: <b>TBD</b>
<b>Attach justification for the Expected Usage Rate and Concentration of the Reducing Agent.</b>	
22.	Describe How Spent Catalyst is Treated or Disposed of: <b>Spent catalyst will be removed and replaced by the vendor. The vendor will be responsible for proper disposal.</b>
<i>If SNCR is used complete Question 23. If not, proceed to Question 24.</i>	
23.	Describe How Frequently the System is Optimized:

<u><b>Stack Information</b></u>	
24.	Emission Point Name: <b>EP 1 through EP 10</b>
24.1.	Stack Height Above Grade: <b>140 feet</b>
24.2.	Stack Exit Diameter: <b>8 feet</b> <i>(Provide Stack Dimensions If Rectangular Stack)</i>
24.3.	Is a Stack Cap Present? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
24.4.	Stack Configuration: <input checked="" type="checkbox"/> Vertical <input type="checkbox"/> Horizontal <input type="checkbox"/> Downward-Venting <i>(check all that apply)</i> <input type="checkbox"/> Other (Specify):
24.5.	Stack Exit Gas Temperature: <b>345 °F</b>
24.6.	Stack Exit Gas Flow Rate: <b>182,898 ACFM</b>
24.7.	Distance to Nearest Property Line: <b>130 feet</b>
24.8.	Describe Nearest Obstruction: <b>Data Center</b>
24.9.	Height of Nearest Obstruction: <b>75 feet</b>
24.10.	Distance to Nearest Obstruction: <b>430 feet</b>



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**Stack Information**

24.11. Are Stack Sampling Ports Provided?       YES    NO

**Monitoring and Alarm Information**

25. Are There Any Alarms You Would Like the Department to Consider When Drafting the Permit?       YES    NO

*If YES, complete the rest of Question 25. If NO, proceed to Question 26.*

25.1. Describe the System Alarm(s):

*If there are more than five alarms, attach additional copies of this page as needed.*

	<b>Operating Parameter Monitored</b>	<b>Describe Alarm Trigger</b>	<b>Monitoring Device or Alarm Type</b>	<b>Does the Alarm Initiate an Automated Response?</b>
25.1.1.	<b>NOx</b>	<b>CEM data</b>	<input checked="" type="checkbox"/> Visual <input checked="" type="checkbox"/> Auditory <input checked="" type="checkbox"/> Automatic (Remote Monitoring) <input type="checkbox"/> Other	<input type="checkbox"/> NO <input checked="" type="checkbox"/> YES Describe: <b>Facility operators will take corrective action</b>
25.1.2.	<b>CO</b>	<b>CEM data</b>	<input checked="" type="checkbox"/> Visual <input checked="" type="checkbox"/> Auditory <input checked="" type="checkbox"/> Automatic (Remote Monitoring) <input type="checkbox"/> Other	<input type="checkbox"/> NO <input checked="" type="checkbox"/> YES Describe: <b>Facility operators will take corrective action</b>
25.1.3.			<input type="checkbox"/> Visual <input type="checkbox"/> Auditory <input type="checkbox"/> Automatic (Remote Monitoring) <input type="checkbox"/> Other	<input type="checkbox"/> NO <input type="checkbox"/> YES Describe:
25.1.4.			<input type="checkbox"/> Visual <input type="checkbox"/> Auditory <input type="checkbox"/> Automatic (Remote Monitoring) <input type="checkbox"/> Other	<input type="checkbox"/> NO <input type="checkbox"/> YES Describe:
25.1.5.			<input type="checkbox"/> Visual <input type="checkbox"/> Auditory <input type="checkbox"/> Automatic (Remote Monitoring) <input type="checkbox"/> Other	<input type="checkbox"/> NO <input type="checkbox"/> YES Describe:

**Additional Information**

26. Is There Any Additional Information Pertinent to this Application?       YES    NO

*If YES, complete the rest of Question 26.*

26.1. Describe: **Stack information provided pertains to EP1 through EP7. Stack information for EP8 through EP10: Diameter - 5 feet, temp - 345, velocity - 70 fps, flow rate - 82,465 cfm, Dist. to property line 190 feet, nearest obstruction - 420 feet (Data Center @ 75 ft high).**