



# Air Quality Permitting Application Form 5.0: Facility Information

FACILITY NAME: _____	DATE: _____
NDEQ Facility ID#: _____	

## Section 5.3: Ethanol Production Facility Information

**IMPORTANT: READ THE INSTRUCTIONS ACCOMPANYING THIS SECTION BEFORE COMPLETING.**  
Do NOT use pencil to fill out this application. Please type responses or print using black ink.

### General Information

1) Indicate the quantity of the following products that have been and/or will be produced:

Product	Current Amount	Maximum Proposed Amount
Denatured Ethanol	gallons/year	gallons/year
Anhydrous Ethanol	gallons/year	gallons/year
Wet Distilled Grain Solubles (WDGS) - % H <sub>2</sub> O	tons/year	tons/year
Modified WDGS (MWDGS) - % H <sub>2</sub> O	tons/year	tons/year
Dry Distilled Grain Solubles (DDGS) - % H <sub>2</sub> O	tons/year	tons/year
Other: _____		
Other: _____		
2) Milling Type: <input type="checkbox"/> Wet Milling (SIC 2046) <input type="checkbox"/> Dry Milling (SIC 2869) <input type="checkbox"/> Other: _____	3) Fermentation Type: <input type="checkbox"/> Batch Fermentation <input type="checkbox"/> Continuous Fermentation <input type="checkbox"/> Other: _____	

4) Type(s) of material used for ethanol production:  Corn    Milo    Cellulose    Other \_\_\_\_\_

5) Maximum grain/material throughput required for maximum ethanol production: \_\_\_\_\_ tons/year

### Grain Receiving Information

6) Indicate the number of the following units that have been and/or will be constructed:

Unit Type	Current Number	Proposed Total Number
Truck Dump Pit		
Rail Dump Pit		

7) For each Dump Pit complete the following:

Unit Name	Select the most appropriate description(s):
	<input type="checkbox"/> Enclosed <input type="checkbox"/> Partially Enclosed <input type="checkbox"/> Choke-flow <input type="checkbox"/> Other _____
	<input type="checkbox"/> Enclosed <input type="checkbox"/> Partially Enclosed <input type="checkbox"/> Choke-flow <input type="checkbox"/> Other _____
	<input type="checkbox"/> Enclosed <input type="checkbox"/> Partially Enclosed <input type="checkbox"/> Choke-flow <input type="checkbox"/> Other _____

If there are/will be more than five dump pits located at the facility, attach additional information so that each unit is described.

8) Indicate the % of grain that currently is and/or will be **received** via the following:

Received By:	Percentage	Received By:	Percentage
Straight Truck	c:    % / a:    %	Rail	c:    % / a:    %
Hopper Bottom Truck	c:    % / a:    %	Other: _____	c:    % / a:    %



# Air Quality Permitting Application

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**NDEQ Facility ID#:** \_\_\_\_\_

### Section 5.3: Ethanol Production Facility Information (cont.)

#### 9) Permanent Storage Information

Complete the following information for each permanent storage unit at the source:

EU ID#	Description	Capacity (bu)	Height (m)	Diameter (m)	New Unit
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>
					<input type="checkbox"/>

If there are more than four permanent storage units (i.e. silos and bins), attach additional information so that each unit is described.

If an open storage pile(s) will be/are used for grain storage, complete Section 6.11 for each storage pile.

#### 10) Grain Scalping and Hammermilling Operations N/A

Complete the following information for each scalper and hammermill at the source:

EU ID#	EU Name	Unit Type	Surge Bin Associated with Unit?	Size of Surge Bin (bu)	New Unit
		<input type="checkbox"/> Scalper <input type="checkbox"/> Hammermill	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/>
		<input type="checkbox"/> Scalper <input type="checkbox"/> Hammermill	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/>
		<input type="checkbox"/> Scalper <input type="checkbox"/> Hammermill	<input type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/>

If there are more than three scalpers, hammermills, or associated surge bins, attach additional information so that each unit is described.

#### Grain and By-Product Drying Operations N/A

11) Indicate the number of grain dryers that currently exist and will exist at the source: c: \_\_\_\_\_ / a: \_\_\_\_\_  N/A

12) Indicate the number of DDGS dryers that currently exist and will exist at the source: c: \_\_\_\_\_ / a: \_\_\_\_\_  N/A

13) For each Dryer complete the following:

EU ID#	EU Name	Drying Capacity (tons/hour)	Select the most appropriate description(s):	New Unit
			<input type="checkbox"/> Column Dryer <input type="checkbox"/> Self Cleaning Screens (<50 mesh) <input type="checkbox"/> Rack Dryer <input type="checkbox"/> Other _____	<input type="checkbox"/>
			<input type="checkbox"/> Column Dryer <input type="checkbox"/> Self Cleaning Screens (<50 mesh) <input type="checkbox"/> Rack Dryer <input type="checkbox"/> Other _____	<input type="checkbox"/>

If there are more than two dryers, attach additional information so that each unit is described.  
Be sure to complete Section 6.1 for each dryer that combusts fuel.

#### 14) New Source Performance Standard Applicability

The grain handling operation located at this Ethanol Manufacturing facility is subject to:  NSPS, Subpart DD     Other \_\_\_\_\_  
 If unknown, Contact the Department  None



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## Section 5.3: Ethanol Production Facility Information (cont.)

Fermentation Operations				
15) Indicate the number of fermenters that currently exist and will exist at the source: c:            / a: <input type="checkbox"/> N/A				
16) Indicate the number of beer wells that currently exist and will exist at the source: c:            / a: <input type="checkbox"/> N/A				
17) Solid By-Product Shipping Information				
Indicate the % of _____ that currently is and will be <b>shipped</b> via the following:				
Shipped By:	Percentage	Shipped By:	Percentage	
Straight Truck	c:        % / a:        %	Rail	c:        % / a:        %	
Hopper Bottom Truck	c:        % / a:        %	Other: _____	c:        % / a:        %	
Indicate the % of _____ that currently is and is anticipated to be <b>shipped</b> via the following:				
Shipped By:	Percentage	Shipped By:	Percentage	
Straight Truck	c:        % / a:        %	Rail	c:        % / a:        %	
Hopper Bottom Truck	c:        % / a:        %	Other: _____	c:        % / a:        %	
If more than two solid by-products will be produced, attach additional information so that each by-product is described.				
Liquid Loadout Information				
18) Indicate the amounts of the following products that have been and will be <b>loaded out</b> :				
Product	Method	million gallons / year	Method	million gallons / year
Anhydrous Ethanol	Truck	c:        / a:	Rail	c:        / a:
Denaturant	Truck	c:        / a:	Rail	c:        / a:
Denatured Ethanol	Truck	c:        / a:	Rail	c:        / a:
E85	Truck	c:        / a:	Rail	c:        / a:
Other: _____	Truck	c:        / a:	Rail	c:        / a:
19) Requested operational limitation(s) for ethanol liquid loadout (please be specific and include units):   				
20) The following Denaturant will be used: <input type="checkbox"/> Natural Gasoline <input type="checkbox"/> Unleaded Gasoline <input type="checkbox"/> Other _____				
21) Type of liquid loading into Trucks: <input type="checkbox"/> None <input type="checkbox"/> Submerged Loading <input type="checkbox"/> Bottom-Fill Loading <input type="checkbox"/> Other _____				
22) Type of liquid loading into Railcars: <input type="checkbox"/> None <input type="checkbox"/> Submerged Loading <input type="checkbox"/> Bottom-Fill Loading <input type="checkbox"/> Other _____				



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Vapor Recovery System Information		
23) Will a vapor recovery system with flare be installed on the liquid loadout operations? <input type="checkbox"/> Yes <input type="checkbox"/> No		
24) The system will recover vapors from: <input type="checkbox"/> Truck loadout <input type="checkbox"/> Rail loadout <input type="checkbox"/> Both <input type="checkbox"/> Other _____		
25) Capture and Control Efficiencies of Vapor Recovery System		
	Truck Loadout	Rail Loadout
(A) Capture Efficiency		
(B) VOC Control Efficiency		
(A x B) Overall Control Efficiency		
For each combustion flare at the facility, also complete Section 7.1 for combustion flares.		
26) Potential to Emit Calculations Attached? <input type="checkbox"/> YES		
27) Additional Information Attached? <input type="checkbox"/> YES <input type="checkbox"/> NO		

**Complete the following ONLY if completing this Section as Part of an Operating Permit Application**

Actual Operating Rates		
28) Indicate the quantity of the following products that have been produced or received:		
Product	Maximum Annual Amount in the Previous Five Years	Amount Last Year
Denatured Ethanol	gallons/year	gallons/year
Anhydrous Ethanol	gallons/year	gallons/year
Wet Distilled Grain Solubles (WDGS) - % H <sub>2</sub> O	tons/year	tons/year
Modified WDGS (MWDGS) - % H <sub>2</sub> O	tons/year	tons/year
Dry Distilled Grain Solubles (DDGS) - % H <sub>2</sub> O	tons/year	tons/year
Grain	tons/year	tons/year
Denaturant - _____	gallons/year	gallons/year
Other: _____		
Other: _____		
Other: _____		
29) Actual Emission Calculations Attached? <input type="checkbox"/> YES		
30) Additional Information Attached? <input type="checkbox"/> YES <input type="checkbox"/> NO		