

Air Quality Permitting Application

Form 5.0: Facility Information

FACILITY NAME: _____	DATE: _____
DWEE 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 ₂ O	tons/year	tons/year
Modified WDGS (MWDGS) - % H ₂ O	tons/year	tons/year
Dry Distilled Grain Solubles (DDGS) - % H ₂ O	tons/year	tons/year
Other: _____		
Other: _____		

2) Milling Type: ☐ Wet Milling (SIC 2046)
☐ Dry Milling (SIC 2869)
☐ Other: _____

3) Fermentation Type: ☐ Batch Fermentation
☐ Continuous Fermentation
☐ 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

6) Note: Manufacturer's specifications are required for the grain scalper, hammermill and grain dryer in steps 11; 14; and Fermentation Operations; and Vapor Recovery System.

Grain Receiving Information

7) 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		

8) 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.

9) Indicate the % of grain that currently is (c:) and/or will be (a:) **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: %

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Section 5.3: Ethanol Production Facility Information (cont.)

10) 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.					
11) Grain Scalping and Hammermilling Operations					<input type="checkbox"/> N/A
Complete the following information for each scalper and hammermill at the source:					
Attach the manufacturers specifications for each unit as part of Step 29.					
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 scalpels, hammermills, or associated surge bins, attach additional information so that each unit is described.					
Grain and By-Product Drying Operations					<input type="checkbox"/> N/A
12) Indicate the number of grain dryers that currently exist and will exist at the source: c: _____ / a: _____ <input type="checkbox"/> N/A					
13) Indicate the number of DDGS dryers that currently exist and will exist at the source: c: _____ / a: _____ <input type="checkbox"/> N/A					
14) For each Dryer complete the following:					
Attach the manufacturer's specifications for each unit as part of Step 29.					
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.					
15) New Source Performance Standard Applicability					
The grain handling operation located at this Ethanol Manufacturing facility is subject to: <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <input type="checkbox"/> NSPS, Subpart DD <input type="checkbox"/> Other _____ </div> If unknown, Contact the Department <input type="checkbox"/> None					

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Fermentation Operations				
Attach the manufacturers specifications for each unit as part of Step 29.				
16) Indicate the number of fermenters that currently exist and will exist at the source: c: / a: <input type="checkbox"/> N/A				
17) Indicate the number of beer wells that currently exist and will exist at the source: c: / a: <input type="checkbox"/> N/A				
18) Solid By-Product Shipping Information				
Indicate the % of _____ that currently is (c:) and will be (a:) shipped 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 (c:) and is anticipated to be (a:) shipped 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				
19) Indicate the amounts of the following products that have been (c:) and will be (a:) loaded out :				
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:
20) Requested operational limitation(s) for ethanol liquid loadout (please be specific and include units):				
21) The following Denaturant will be used: <input type="checkbox"/> Natural Gasoline <input type="checkbox"/> Unleaded Gasoline <input type="checkbox"/> Other _____				
22) 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 _____				
23) 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		
Attach the manufacturers specifications for each unit as part of Step 29.		
24) Control Equipment Name/Description: _____		
25) Will a vapor recovery system with flare be installed on the liquid loadout operations? <input type="checkbox"/> Yes <input type="checkbox"/> No		
26) The system will recover vapors from: <input type="checkbox"/> Truck loadout <input type="checkbox"/> Rail loadout <input type="checkbox"/> Both <input type="checkbox"/> Other _____		
27) 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.		
28) Attach Potential to Emit Calculations <input type="checkbox"/>		
29) Attach Manufacturer's Specifications for Each Emission Unit or Control Equipment Listed in #11; #14; Fermentations Operations; and Vapor Recovery System <input type="checkbox"/>		
30) 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		
31) 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 ₂ O	tons/year	tons/year
Modified WDGS (MWDGS) - % H ₂ O	tons/year	tons/year
Dry Distilled Grain Solubles (DDGS) - % H ₂ O	tons/year	tons/year
Grain	tons/year	tons/year
Denaturant - _____	gallons/year	gallons/year
Other: _____		
Other: _____		
Other: _____		
32) Attach Actual Emission Calculations <input type="checkbox"/>		
33) Additional Information Attached? <input type="checkbox"/> YES <input type="checkbox"/> NO		