



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Mike Braun
Governor

Clint Woods
Commissioner

NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding a Significant Modification to a
Part 70 Operating Permit

for POET Biorefining - Shelbyville, LLC in Shelby County

Significant Source Modification No.: 145-49901-00089
Significant Permit Modification No.: 145-49972-00089

The Indiana Department of Environmental Management (IDEM) has received an application from POET Biorefining - Shelbyville, LLC, located at 2373 W 300 N, Shelbyville, Indiana 46176 for a significant modification of its Part 70 Operating Permit issued on August 14, 2023. If approved by IDEM's Office of Air Quality (OAQ), this proposed modification would allow POET Biorefining - Shelbyville, LLC to make certain changes at its existing source. POET Biorefining - Shelbyville, LLC has applied to expand their plant, effectively doubling the size and capacity of the existing plant. Additionally, the existing plant will undergo the following modifications:

- Existing Grain Bin #1 (EU007) - This bin will be able to receive grain that was received at the new grain building (EU060).
- Existing Yeast Propagation Tank and Distillation System (EU018, EU027, EU028, EU029, EU030, EU031) - A new, smaller wet scrubber (CE050) will be installed to control these emission units. During normal operations, the units will exhaust to the new scrubber (CE50), which then exhausts to the RTO (CE014). During RTO #1 downtime, CE50 may exhaust to atmosphere through SV054.
- Existing Ethanol loadout (EU042) - The permit currently lists two truck and two rail loadouts, approved for construction in TV NSC No. T145-39686-00089, issued September 26, 2018, however the second rail loadout was not previously installed. The second rail loadout skid will be installed as part of this project. This project will include replacing the existing flare (CE021) with a new larger flare (CE047).
- Existing Ethanol Tanks (T003, T004, T001) – These tanks will ultimately be able to receive ethanol from the existing process equipment (i.e., plant 1) or the new process equipment (i.e., plant 2), but no physical modification to the tanks themselves is planned.
- Existing DDGS Loadout (EU038, EU039), Flat Storage (F008) – DDGS from the plant 2 may be loaded out through the existing loadout equipment and may be stored in the existing flat storage building. There is no physical change to these pieces of equipment specifically, but there will be new conveying equipment to convey the DDGS to these locations.

The following is a list of the new emission units and pollution control device(s):

(a) Grain Receiving, Handling, and Hammermilling units, approved in 2026 for construction, as follows:

Unit ID	Unit Description	Unit Capacity	Control Equipment	Stack Vent ID
Grain Receiving, Handling, and Hammermilling				
EU059	Combined Surge Bin	280 tons/hr	Baghouse CE027	SV027
EU060	Grain Receiving #2	840 tons/hr	Baghouse CE027	SV027
EU061	Two Grain Legs #2	840 tons/hr	Baghouse CE027	SV027
EU062	Grain Bin 6	840 tons/hr	Cartridge Filter CE028	SV028
EU063	Conveyor (EU063b) and Grain Bin 7	840 tons/hr	Cartridge Filter CE029	SV029

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We appreciate your input!



EU064	Conveyor (EU067) and Grain Bin 8	840 tons/hr	Cartridge Filter CE030	SV030
EU065	Conveyor (EU065b) and Grain Bin 9	840 tons/hr	Cartridge Filter CE031	SV031
EU066	Grain Bin Fill Conveyor #3	840 tons/hr	Cartridge Filter CE032	SV032, SV028
EU067	Grain Bin Fill Conveyor #4	840 tons/hr	Cartridge Filter CE033	SV033, SV030
EU068	Grain Scalper #2	140 tons/hr	Baghouse CE027	SV027
EU069	Surge Bin #2	140 tons/hr	Baghouse CE034	SV034
EU070	Hammermill #6	45 tons/hr	Baghouse CE035	SV035
EU071	Hammermill #7	45 tons/hr	Baghouse CE036	SV036
EU072	Hammermill #8	45 tons/hr	Baghouse CE037	SV037
EU073	Hammermill #9	45 tons/hr	Baghouse CE038	SV038
EU074	Hammermill #10	45 tons/hr	Baghouse CE039	SV039
EU075	Flour Conveyance #2	140 tons/hr	Baghouse CE034	SV034
EU076	Yeast Propagation Tank #2	19,800 gallons	Normal Operation - CE051, CE042	SV042
			AOS3 - Scrubber CE051	SV055
			AOS4 - Scrubber (CE040 or CE041) and RTO #2 (CE042)	SV042
EU103	Slurry Tank #2	10,000 gallons	N/A	N/A

(b) Fermentation process units, approved in 2026 for construction, as follows:

Unit ID	Unit Description	Unit Capacity	Control Equipment	Stack Vent ID
Fermentation				
EU077 through EU084	Fermenter #9 - #16	730,000 gallons (each)	Normal Operation - Scrubber (CE040 or CE041), RTO #2 (CE042)	SV042
			AOS3 - Scrubber (CE040 or CE041)	SV040 or SV041
EU085	Beer Well #2	890,000 gallons	Normal Operation - Scrubber (CE040 or CE041), RTO #2 (CE042)	SV042
			AOS3 - Scrubber (CE040 or CE041)	SV040 or SV041

(c) Distillation process units, approved in 2026 for construction, as follows:

Unit ID	Unit Description	Unit Capacity	Control Equipment	Stack Vent ID
EU086	Beer Stripper #2	1,250 gpm	Normal Operation - Scrubber 6 (CE051), RTO #2 (CE042)	SV042
			AOS3 - Scrubber 6 (CE051)	SV055
			AOS4 - Scrubber (CE040 or CE041) and RTO #2 (CE042)	SV042
EU087	Rectifier Column #2	1,250 gpm	Normal Operation - Scrubber 6 (CE051), RTO #2 (CE042)	SV042
			AOS3 - Scrubber 6 (CE051)	SV055
			AOS4 - Scrubber (CE040 or CE041) and RTO #2 (CE042)	SV042
EU088	Side Stripper #2	1,250 gpm	Normal Operation - Scrubber 6 (CE051), RTO #2 (CE042)	SV042
			AOS3 - Scrubber 6 (CE051)	SV055

			AOS4 - Scrubber (CE040 or CE041) and RTO #2 (CE042)	SV042
EU089	One (1) set of Three (3) Molecular Sieves #2	1,250 gpm	Normal Operation - Scrubber 6 (CE051), RTO #2 (CE042)	SV042
			AOS3 - Scrubber 6 (CE051)	SV055
			AOS4 - Scrubber (CE040 or CE041) and RTO #2 (CE042)	SV042
EU090	One (1) set of Six (6) Evaporators #2	1,250 gpm	Normal Operation - Scrubber 6 (CE051), RTO #2 (CE042)	SV042
			AOS3 - Scrubber 6 (CE051)	SV055
			AOS4 - Scrubber (CE040 or CE041) and RTO #2 (CE042)	SV042
EU091	One (1) set of Four (4) Centrifuges #2	1,100 gpm	Normal Operation - RTO #2 (CE042)	SV042
			AOS3 - None	SV043

(d) DDGS Drying, Cooling, Handling and Loadout process units, approved in 2026 for construction, as follows:

Unit ID	Unit Description	Unit Capacity	Control Equipment	Stack Vent ID
EU092	DDGS Dryer #3	35 tons/hr DDGS	Normal Operation - Multiclones (CE048, CE049), RTO #2 (CE042)	SV042
		65 MMBtu/hr	AOS3 - Dryer will not operate	-
EU093	DDGS Dryer #4	35 tons/hr DDGS	Multiclones (CE048, CE049), RTO #2 (CE042)	SV042
		65 MMBtu/hr	AOS3 - Dryer will not operate	-
CE042	RTO #2			
EU094	DDG Fluid Bed Cooler #2	35 ton/hr	Normal Operation - Baghouse (CE043), RTO #2 (CE042)	SV042
			AOS3 - CE043	SV044
EU095	DDGS Storage Silo #2 (5,000 ton)	35 ton/hr	Baghouse CE044	SV045
EU096	DDGS Transfer #2 to Loadout	400 ton/hr	Baghouse CE045	SV046
EU097	DDGS Container Loadout Building	400 ton/hr	Baghouse CE046	SV047
EU098	DDGS Flat Storage Loading #2	35 ton/hr	N/A	SV048

(e) Utility units, approved in 2026 for construction, as follows:

Unit ID	Unit Description	Unit Capacity	Fuel	Stack Vent ID
EU099	Boiler #3	145 MMBtu/hr	Natural gas	SV050
EU100	Boiler #4	145 MMBtu/hr	Natural gas	SV051
EU101	Generator #3	2,680 hp	diesel	SV052
EU102	Generator #4	2,680 hp	diesel	SV053

(f) Storage tanks, approved in 2026 for construction, as follows:

Unit ID	Unit Description	Unit Capacity	Stack Vent ID
T009	190 Proof Ethanol Storage Tank #2	270,000 gallons	N/A
T012	Thin Stillage Tank #2	500,000 gallons	N/A
T013	Syrup Tank #2	61,000 gallons	N/A

T010	Ethanol Storage Tank	2,000,000 gallons	N/A
T011	Denaturant Storage Tank	127,000 gallons	N/A

(g) Corn oil system units, approved in 2026 for construction, as follows:

Unit ID	Unit Description	Unit Capacity	Stack Vent ID
EU104	Skim Centrifuge #2	150 gpm	N/A
EU105	Skim Centrifuge #3	150 gpm	N/A
EU106	Oil Centrifuge #2	150 gpm	N/A
EU107	Defatted Syrup Tank #2	1,101 gallons	N/A
EU108	Defatted Syrup Tank #3	1,101 gallons	N/A
EU109	Emulsion Tank #2	4,600 gallons	N/A
EU110	Defatted Emulsion Tank #2	530 gallons	N/A
EU111	Oil Separation Tank #2	2,750 gallons	N/A
EU112	Oil Rundown Tank #2	229 gallons	N/A
EU113	Oil Storage Tank 3	40,000 gallons	N/A
EU114	Oil Storage Tank 4	40,000 gallons	N/A

(h) One (1) cooling tower, approved in 2026 for construction, as follows:

Unit ID	Unit Description	Unit Capacity	Control Equipment	Stack Vent ID
F012	Cooling Tower #2	30,000 gallons	N/A	N/A

The following is a list of the modified emission units and pollution control device(s):

(a) One (1) 190 Proof Ethanol Storage tank, identified as T001, constructed in 2018, approved in 2026 for modification, with a maximum capacity of 270,000 gallons, and exhausting to the atmosphere.

This is an affected facility under 40 CFR 60, Subpart Kb.

(b) Grain Bins, with a maximum throughput rate into bins of 840 tons per hour, consisting of the following:

(1) One (1) grain bin, identified as EU007, approved in 2026 for modification, with a maximum capacity of 53,000 bushels, using a baghouse (CE001) as control and exhausting to SV001.

(c) Yeast propagation and distillation process units, constructed in 2018 and approved in 2026 for modification, as follows:

Unit ID	Unit Description	Unit Capacity	Control Equipment	Stack Vent ID
EU018	Yeast Propagation Tank #1	19,800 gallons	Normal Operation - Scrubber (CE050), RTO #1 (CE014)	SV014
			AOS1 - Scrubber (CE050)	SV054
			AOS2 - Scrubber (CE012 or CE013), RTO #1 (CE014)	SV014
EU027	Beer Stripper #1	1,250 gpm	Normal Operation - Scrubber (CE050), RTO #1 (CE014)	SV014
			AOS1 - Scrubber (CE050)	SV054
			AOS2 - Scrubber (CE012 or CE013), RTO #1 (CE014)	SV014
EU028	Rectifier Column #1	1,250 gpm	Normal Operation - Scrubber (CE050), RTO #1 (CE014)	SV014
			AOS1 - Scrubber (CE050)	SV054
			AOS2 - Scrubber (CE012 or CE013), RTO #1 (CE014)	SV014
EU029	Side Stripper #1	1,250 gpm	Normal Operation - Scrubber (CE050), RTO #1 (CE014)	SV014
			AOS1 - Scrubber (CE050)	SV054

			AOS2 - Scrubber (CE012 or CE013), RTO #1 (CE014)	SV014
EU030	One (1) set of Three (3) Molecular Sieves #1	1,250 gpm	Normal Operation - Scrubber (CE050), RTO #1 (CE014)	SV014
			AOS1 - Scrubber (CE050)	SV054
			AOS2 - Scrubber (CE012 or CE013), RTO #1 (CE014)	SV014
EU031	One (1) set of Six (6) Evaporators #2	1,250 gpm	Normal Operation - Scrubber (CE050), RTO #1 (CE014)	SV014
			AOS1 - Scrubber (CE050)	SV054
			AOS2 - Scrubber (CE012 or CE013), RTO #1 (CE014)	SV014
These are affected facilities under 40 CFR 60, Subpart VVa.				

- (d) One (1) ethanol loading system, identified as EU042, constructed in 2018, consisting of two (2) racks for trucks and two (2) racks for railcars, with a maximum throughput rate of 78,000 gallons per hour when loading trucks and 144,000 gallons per hour when loading railcars. This system is controlled by enclosed flare CE047 (replaced in 2026), which is fueled by natural gas and has a pilot gas flare heat input capacity of 0.09 MMBtu per hour and a 5 MMBtu/hr gas assist, and exhausts through stack SV020.

These are affected facilities under 40 CFR 60, Subpart VVa.

The applicant intends to construct and operate new equipment that will emit air pollutants; therefore, the permit contains new or different permit conditions. In addition, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g., changes that add or modify synthetic minor emission limits). IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow the applicant to make this change.

A copy of the permit application and IDEM's preliminary findings have been sent to:

Shelby County Public Library
57 W Broadway St
Shelbyville, IN 46176

A copy of the preliminary findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>.

A copy of the application and preliminary findings is also available via IDEM's Virtual File Cabinet (VFC) located at <https://www.in.gov/idem/legal/public-records/virtual-file-cabinet/>. Once you have accessed VFC, you will then have the option to search for source related documents using a variety of criteria. To find documents related to this air permit, click on "Advanced Search", specify "OAQ" in the Program search field, specify the five-digit permit number "49972" or the five-digit source modification number "49901" in the Permit # search field, then click the Search button at the top or bottom of the webpage.

How can you participate in this process?

This notice is posted on IDEM's website (<https://www.in.gov/idem/public-notices/>). The date that this notice is posted on IDEM's website marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit by sending a written request to IDEM at the address below. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If IDEM decides to conduct a public hearing and/or public meeting, IDEM will post a separate announcement of the date, time, and location of that public hearing and/or public meeting on IDEM's website (<https://www.in.gov/idem/public-notices/>). At a hearing, you would have an opportunity to submit written comments and make verbal

comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number SPM 145-49972-00089 and SSM145-49901-00089 in all correspondence.

Comments should be sent to:

Tamera Wessel
IDEM, Office of Air Quality
Indiana Government Center North
100 North Senate Avenue, Room 13W
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for Tamera Wessel
Or dial directly: (317) 234-8530
Fax: (317) 232-6749 attn: Tamera Wessel
E-mail: twessel@idem.IN.gov

In order to notify you of our final decision regarding this permitting action, your U.S. mailing address must be submitted with all comments.

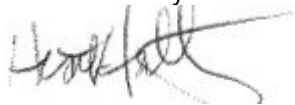
All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local officials.

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: <https://www.in.gov/idem/airpermit/public-participation/>; and the Citizens' Guide to IDEM on the Internet at: <https://www.in.gov/idem/resources/citizens-guide-to-idem/>.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the addresses indicated above and will also be sent to the local library indicated above.

If you have any questions, please contact Tamera Wessel or my staff at the above address.



Heath Hartley, Section Chief
Permits Branch
Office of Air Quality