

Appendix A – Public Record

A.1 – Public Hearing Notice

March 19, 2024

Mr. Dennis Egan
CEO
Epitome Energy, LLC
1651 Old Highway 19
Redwing, MN 55066

Re: Air Pollution Control
Draft Permit to Construct No. ACP-18210 v1.0

Dear Mr. Egan:

Pursuant to the Air Pollution Control Rules of the State of North Dakota, the Department of Environmental Quality (Department) has reviewed the permit application dated June 2, 2023, and revised on August 25, 2023, to obtain a Permit to Construct for initial construction and operation of the Epitome Energy LLC soybean processing plant to be located in Grand Forks County, North Dakota.

Before making final determination on the draft Permit to Construct, the Department must solicit public comment by means of the enclosed public notice. As indicated in the notice, the public comment period will begin on March 28, 2024, and end on April 27, 2024. The Department's analysis and a draft copy of the Permit to Construct may be found at <https://deq.nd.gov/AQ/PublicCom.aspx>. The documents will be posted on or before March 28, 2024.

All comments received will be considered in the final determination concerning issuance of the permit. You will be notified in writing of our final determination.

If you have any questions, please contact me at (701)328-5229 or destroh@nd.gov.

Sincerely,



David Stroh
Manager, Permit Program
Division of Air Quality

DS:er

Enc:

xc: EPA Region Permit 8 email (r8airpermitting@epa.gov)

NOTICE OF INTENT TO ISSUE AN
AIR POLLUTION CONTROL
PERMIT TO CONSTRUCT

Take notice that the North Dakota Department of Environmental Quality (NDDEQ) proposes to issue an Air Pollution Control Permit to Construct to Epitome Energy, LLC (Epitome) in accordance with the North Dakota Air Pollution Control Rules. The proposed air pollution control permit is for initial construction and operation of a soybean processing plant to be located in Grand Forks County, North Dakota.

Preliminary evaluations made by Department staff indicate that the project will comply with all applicable Air Pollution Control Rules and there will be no detrimental/significant effects to air quality. Predicted concentrations in the air surrounding the facility are expected to be below the state and federal ambient air quality standards, which are standards that are set at a level to protect human health and the environment.

An air dispersion modeling analysis was conducted to determine the cumulative impact from the Epitome plant, other nearby sources of significance, and background. Modeled impacts were below ambient air quality standards for each modeled pollutant, as follows: 25% of the PM₁₀ 24-hour standard, 55% of the PM_{2.5} 24-hour standard, and 67% of the PM_{2.5} annual standard. More detail regarding the projected modeled impacts can be found in the NDDEQ's Air Quality Impacts Analysis.

A 30-day public comment period for the proposed permit to construct will begin March 28, 2024, and end on April 27, 2024. Direct comments in writing, including Re: Public Comment Permit Number ACP-18210 v1.0, to AirQuality@nd.gov or the NDDEQ, Division of Air Quality, 4201 Normandy Street, 2nd Floor, Bismarck, ND 58503-1324. Emailed comments must be sent to the email address above to be considered. Comments must be received by 11:59 p.m. central time on the last day of the public comment period to be considered in the final permit determination.

In accordance with NDAC 33.1-15-14-02, a public information meeting and public hearing regarding issuance of the Air Pollution Control Permit to Construct will be held April 23, 2024, beginning at 5:30 p.m. CDT Grand Forks City Hall, 255 N 4th St, Grand Forks, ND 58203.

The application, NDDEQ's Air Quality Effects Analysis, NDDEQ's Air Quality Impacts Analysis, and NDDEQ's proposed air pollution control permit are available for review at NDDEQ's office and on-line at <http://deq.nd.gov/AQ/PublicCom.aspx>. A copy of these documents may be obtained by writing to the Division of Air Quality or contacting David Stroh at (701)328 5229 or by email at destroh@nd.gov.

The NDDEQ will consider every request for reasonable accommodation to provide an accessible meeting facility or other accommodation for people with disabilities, language interpretation for people with limited English proficiency (LEP), and translations of written material necessary to access programs and information. Language assistance services are available free of charge to you.

To request accommodations or language assistance, contact the NDDEQ Non-discrimination/EJ Coordinator at 701-328-5150 or deqEJ@nd.gov. TTY users may use Relay North Dakota at 711 or 1-800-366-6888.

Dated this 19th day of March 2024

James L. Semerad
Director
Division of Air Quality

A.2 – Invoice of Publication

North Dakota Newspaper Association

501 East Main Ave.

Bismarck, North Dakota 58501

Phone: 1-701-223-6397 Fax: 1-701-223-8185

INVOICE

April 10, 2024

Order: 24035ND0

Invoice# 14085

Attn: David Stroh	
ND Department of Environmental Quality	
4201 Normandy Street	
Bismarck, North Dakota 58503-1324	
Voice:	Fax:
Email: DEQ-Invoice@nd.gov	

Advertiser: Division of Air Quality

Brand:

Campaign

Client Order Number:

Amount Due:

\$76.00


Please detach and return this portion with your payment

Division of Air Quality Invoice# 14085 P.O.#: Client Order Number:

Run Date	Ad Size	Rate Type	Rate	Color Rate	Total	Discount	(%)	Amount after Discount	Page
Grand Forks Herald (Grand Forks, North Dakota)			<i>Epitome Energy</i>						
03/27/2024	100.00	Notice A Line	\$0.76		\$76.00	\$0.00	(0.00%)	\$76.00	
Caption: Notice of intent to issue an air pollution control permit to construct									
Subtotal:	100.00		\$0.76	\$0.00	\$76.00	\$0.00		\$76.00	

Gross Advertising	\$76.00	Total Misc	\$0.00	Amount Paid	\$0.00
Agency Discount	\$0.00	Tax	\$0.00	Adjustments	\$0.00
Other Discount	\$0.00	Total Billed	\$76.00	Payment Date	
Service Charge	\$0.00	Unbilled	\$0.00	Balance Due	\$76.00

If you'd like to pay your invoice online, go to www.ndna.com/billpay. We accept Visa/Mastercard. A 3% fee will automatically be added to your total. We also accept checks and ACH, with no additional fee added. Contact accounting@ndna.com for ACH information. Thank you!

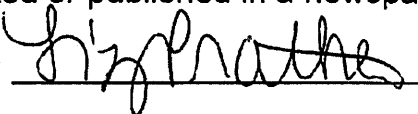
ok for payment
5511 EQ1250 11
4/11/24




Affidavit of Publication

Liz Prather, being duly sworn, states as follows:

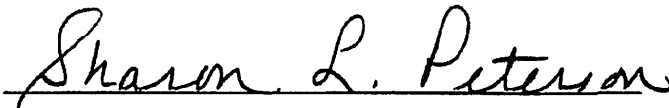
1. I am the designated agent, under the provisions and for the purposes of, Section 31-04-06, NDCC, for the newspapers listed on the attached exhibits.
2. The newspapers listed on the exhibits published the advertisement of: **ND Department of Environmental Quality, Division of Air Quality, Notice of intent to issue an air pollution control permit to construct, 1 time(s) as required by law or ordinance.**
3. All of the listed newspapers are legal newspapers in the State of North Dakota and, under the provisions of Section 46-05-01, NDCC, are qualified to publish any public notice or any matter required by law or ordinance to be printed or published in a newspaper in North Dakota.

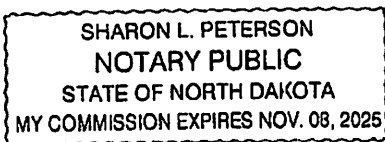
Signed: 

State of North Dakota

County of Burleigh

Subscribed and sworn to before me this 8th day of April, 2024.





A.3 – Registration List of Attendees

A.4 – Hearing Transcript

Epitome Energy, LLC
ACP-18210 v1.0
Epitome Energy Hearing Testimony from 04/23/2024

David Stroh: Good evening. My name is David Stroh, Manager of the Permit Program for the Air Quality Division of the North Dakota Department of Environmental Quality, and I will be acting as hearing officer for this public hearing. I will now open the public hearing portion of today's meeting at Grand Forks City Hall in Grand Forks, North Dakota. Let the record show that the time is approximately 6:39 p.m. on April 23, 2024. This is the time and place that was scheduled for the public hearing for the Epitome Energy, LLC Draft Air Pollution Control Permit to Construct pursuant to North Dakota Century Code Title 23.1 and North Dakota Administrative Code Chapter 33.1-15-14.

Anyone wishing to present verbal testimony on the draft Permit to Construct will be allowed to speak. Anyone presenting testimony is asked to state their name, address, and the organization they represent, if any. Also, anyone presenting testimony is required to sign the registration sheet for the record. Please note that this is not a legislative hearing, it is not a judicial hearing or a court hearing. The purpose of this hearing is to receive input, such as additional data or viewpoints from interested parties, especially for those who have not or will not have the opportunity to submit written testimony. Both written and oral testimony will be considered equally. It will not be necessary to repeat testimony or comments that have been or will be submitted in writing or that have been previously stated during the hearing. I would like to emphasize that this hearing is not a question-and-answer session, and the Department will not be responding to comments made during the hearing. However, if there's clarification needed on the proposed permit, we will be listening to your testimony, and we'll be happy to provide clarification after the public testimony portion of the hearing has concluded.

Also, please remember that the proposed permit only relates to the health and environmental impacts associated with issuing the permit to construct under North Dakota Century Code Title 23.1 and North Dakota Administrative Code Chapter 33.1-15-14 related to air quality controls and emissions. It does not relate to social and economic impacts or compatible land use. Therefore, we ask that you limit your comments to those concerns related to the proposed air permit to ensure that all interested parties have the opportunity to provide a comment for the record. We also ask that you limit your comments to 5 minutes and address comments to my attention for the first round of testimony. Again, my name is David Stroh. If time remains at the end, commentators who request more time may be allowed additional time to provide comments.

It's important to note that the comment period is open through April 27, 2024, and written comments to be considered as part of the record may be submitted until then. Additional information related to the proposed Epitome Energy facility can be found at the North Dakota Department of Environmental Quality webpage at deq.nd.gov. With that, when your name is called, we ask that you please come forward and speak into the microphone to ensure that your comments are recorded for the hearing record.

I am going to go in the order of the folks that signed up to read the comments. So, we will start with Gary Bridgeford.

Gary Bridgeford: My name is Gary Bridgeford. I'm a resident of Grand Forks. I've been involved in the industrial construction business for about 46 years. I'm currently the senior vice president of Industrial Contract Services in Grand Forks. We're heavily involved in the Ag business. We do a lot of work at the state mill, and we built an ethanol plant here in town. So, we've been an industrial business my whole career. I'm a registered engineer in both North Dakota and Minnesota and I'm here tonight to voice my support for this project. And I'm hopeful that the various processes can be passed through and have a successful air permit at the end of the road. Some of the benefits, of course, that will come as Dennis has spoken about, it will be 50 or 60 jobs at the plant. There'll be a, probably a \$300 million impact to the local economy that will result in increased tax base for the city and county of likely more students in our school systems. And just a lot of jobs, ancillary jobs in the construction industry, trucking industry, railroad workers and then, of course, the farmers, the farmers will benefit from increase in the income for their soybeans. So, thank you for your time. If anybody has any questions, I'd be happy to try to answer them.

David Stroh: Thank you, Gary. Nancy Johnson

Nancy Johnson: Good evening. For the record, my name is Nancy Johnson. I'm the executive director of the North Dakota Soybean Growers Association. Our office is in Fargo, and I do live in rural Hillsboro. I'm here at the direction of our board of directors in support of this project in Grand Forks. One of the things that Dennis Egan talked about is the importance of soybeans to the North Dakota economy. As you'll note, the farm gate value of soybeans has increased dramatically over time. And because so many acres of soybeans are now grown in North Dakota, we've exceeded wheat, which has long been the key crop in North Dakota. So, if you look at the fact that we are now at in North Dakota, 2.7 billion farmgate value for soybeans, that is a big part of the overall economic contribution to the state of North Dakota. In the six counties in North Dakota that Dennis did outline as receiving soybeans, from those six counties last year had 29 million bushels of soybeans, almost 30 million bushels of soybeans. One of the things that he didn't talk much about is the specific economic impact of the soybeans staying here and having value added, rather than getting on a train and going to China and being crushed in China. So that, nearly 30 million bushels, if you said there's a ten-cent change in the amount of money that farmers got, that \$0.10 would translate into \$3 million in those six counties for farmers each and every year. It's an ongoing return to the farmers in the area. And as we've seen in the paper, on more than one occasion, about 50% of the sales tax that is collected in the city of Grand Forks does come from the rural area around Grand Forks. So, when the farmers come in and buy their pickups and their farm machinery, they're contributing to the economy of Grand Forks. On the second page, one of the questions is why? Why does soybeans gain such value? Well, one

of the things that farmers have done to develop value for soybeans is work on the development of biodiesel. Minnesota does have a 20% biodiesel mandate. Biodiesel is a combination of petroleum diesel with a processed product such as soybeans. And in the end, you have a diesel product that runs a truck, a tractor, whatever. The thing that has changed, as you will notice on this second page, is the orange line that's gone up is renewable diesel. What's the difference between biodiesel and renewable diesel? Renewable diesel is simply the idea that you take the oil from a soybean, and you put it through a refining process that's identical, with the exception of how much hydrogen you use to what you do to create crack petroleum into diesel fuel. And so North Dakota of course, has a biodiesel refinery at South Hart, just south of Dickinson. And the final slide is simply a look at what's driving that renewable diesel market. There are several, several states, such as California, that have mandated a drop in particulate matter. And of course, it's an air quality concern. And there has been a huge change in the air quality in California since they have changed their mandates there. And that air quality change has primarily come from renewable diesel being used in trucks on the roads of California. And I will stand for any questions. Thank you so much for your time.

David Stroh: Thank you Nancy. Matt Marshall.

Matt Marshall: Good evening. Thank you for the opportunity to come here and testify or provide public feedback. My name is Matt Marshall. I'm the rates, member services and economic development manager for Minnkota Power Cooperative. We're a generation transmission entity here in Grand Forks, serving 11 member cooperatives in northeastern North Dakota and northwestern Minnesota. I won't go into extraordinary depth in just the incredible economic benefit that this brings to our membership on both sides of the river, Minnesota and North Dakota. You'll hear a lot of that support. Nancy did a wonderful job at the impact to our agricultural producers. So, we are here to support the air permit based on our understanding of the process, we feel like Epitec is putting forth a great plan, that hopefully will comply with your requirements. On a personal note, I am a resident of Grand Forks, North Dakota, and am very excited for what this project brings to our community and my family personally. So, thank you very much.

David Stroh: Thank you, Matt. Cole Johnson.

Cole Johnson: Good evening. I'm Cole Johnson, manager of engineering with Nodak Electric Cooperative here in Grand Forks. I'm also a rural Grand Forks, City of Grand Forks resident. I'm just going to reiterate Matt's point. From the electrical utility side, Nodak Electric also supports this project more on an economic basis. With the with the large Ag industry, being able to stabilize rates, large users like Epitec Energy would bring revenue to our member owners. We're not for profit electric cooperatives. So, all of our profits go back to our membership. And a

large user like Epitome Energy would bring in more revenue to Nodak. And being able to distribute that revenue back to our membership across all 8000 mi² of Nodak territory. So, thank you for your time.

David Stroh: Thank you, Cole. Keith Lund.

Keith Lund: Good evening. My name is Keith Lund. I'm president and CEO of the Grand Forks Region Economic Development Corporation. I appreciate you coming to Grand Forks to conduct this hearing. I've had the pleasure to work with Mr. Egan and Epitome Energy to know Dennis for about three years, and to work actively with them in support of this project for two years. Dennis didn't mention, but he's a former mayor, so he certainly understands community engagement and communicating, you know, the benefits of a project and answering questions and being present to make those presentations. Mr. Egan has done that on at least three occasions, and I'm sure many, many more that I'm not remembering. So, he's done a fantastic job of community engagement. This project is supported by the city by virtue of them entering the, the development agreement, as well as the infrastructure that they're planning to do to support the project. You're going to hear from the chamber in a little bit. If time permits, they'll talk about their support for the project and my organization, Economic Development Corporation. We, of course, are very supportive of the things you've heard about today. I know that's not the purpose of the meeting, but certainly the jobs and the expansion of the tax base as well as opportunities it creates for other supportive businesses like transportation. You can imagine that. Also, it's been touched on a couple of times, increased pricing for farmers. It's a really fantastic opportunity to do that. It hits all the markers from an economic development corporation standpoint, but this is a hearing on the air quality permit. So, I want to address that. So, I'm not an expert, but it's my understanding that the modeling that has been done in the application that has been submitted by Mr. Egan and his partners at Stantec, demonstrate that this project will fall well within the parameters established by the Department of Environmental Quality, as well as the Environmental Protection Agency. And based on the technical merits, we encourage your approval of the Air Quality Permit. Thank you.

David Stroh: Thank you Keith. Tony Hodny.

Barry Wilfahrt: Tony had to go to a basketball game. His twin daughters are starting for Red River tonight, so I'll just step in for Tony.

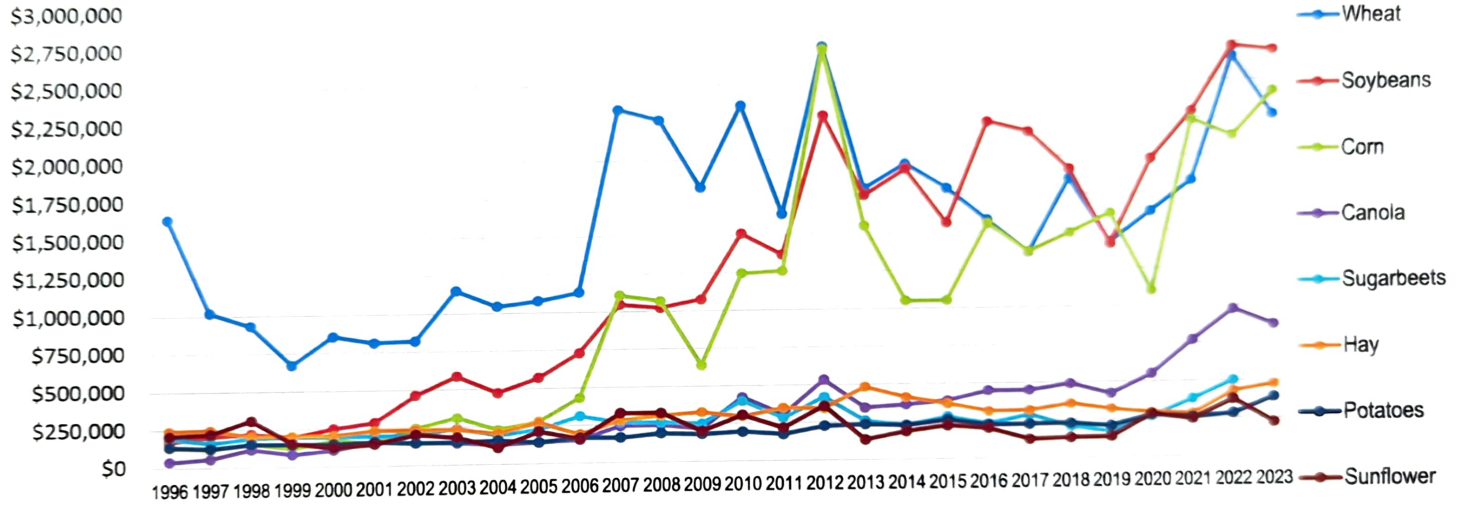
Tony is the chair of the Chamber of Commerce Board of Directors. I'm the president and CEO, Barry Wilfahrt. I also am a resident of Grand Forks. On behalf of the Grand Forks / East Grand Forks Chamber and its more than 1000 members, we urge your support of the issuance of the Air Permit for the Epitome Energy soybean processing operation. Our community has a long history

of Ag processing and value-added agriculture. The North Dakota Mill has been milling wheat for over a century here in Grand Forks, American Crystal Sugar is just on the other side of the river, has been processing sugar beets for 98 years. In more recent years, Simplot and several other Ag processors have been operating in our community. All of these firms have contributed to the wealth of the Northern Valley. This plant will generate approximately \$300 million in annual economic impact throughout the Northern Valley. Thanks in advance for your favorable consideration in issuing this air permit.

David Stroh: Thank you all for coming. All information gathered at this hearing will be provided to the Department of Environmental Quality, which is the decision-making body. The record will be held open for written comments through April 27th, 2024. At this time, I close the hearing on the Department of Environmental Quality Draft Air Pollution Control Permit to construct for the Epitome Energy facility. The hearing is closed at 6:55 p.m.

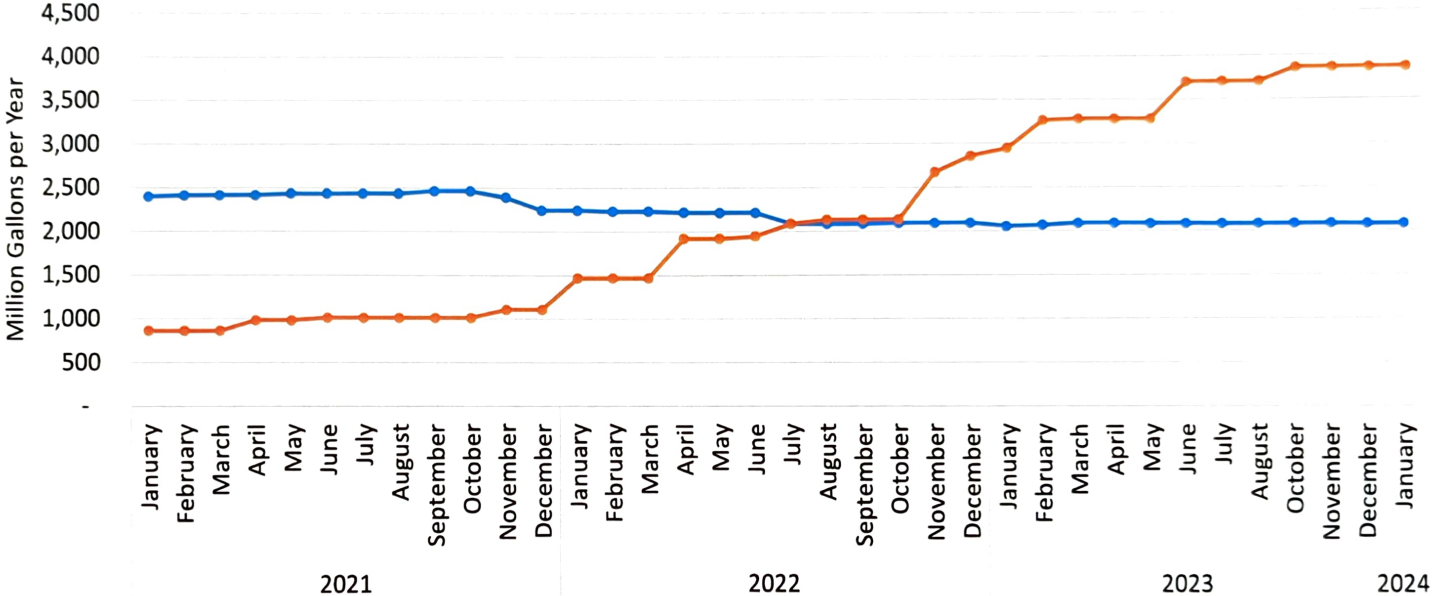
Nancy

ND Farm Gate Value for Select Crops



\$1,000 – Source: NASS

U.S. Biomass Based Diesel Capacity

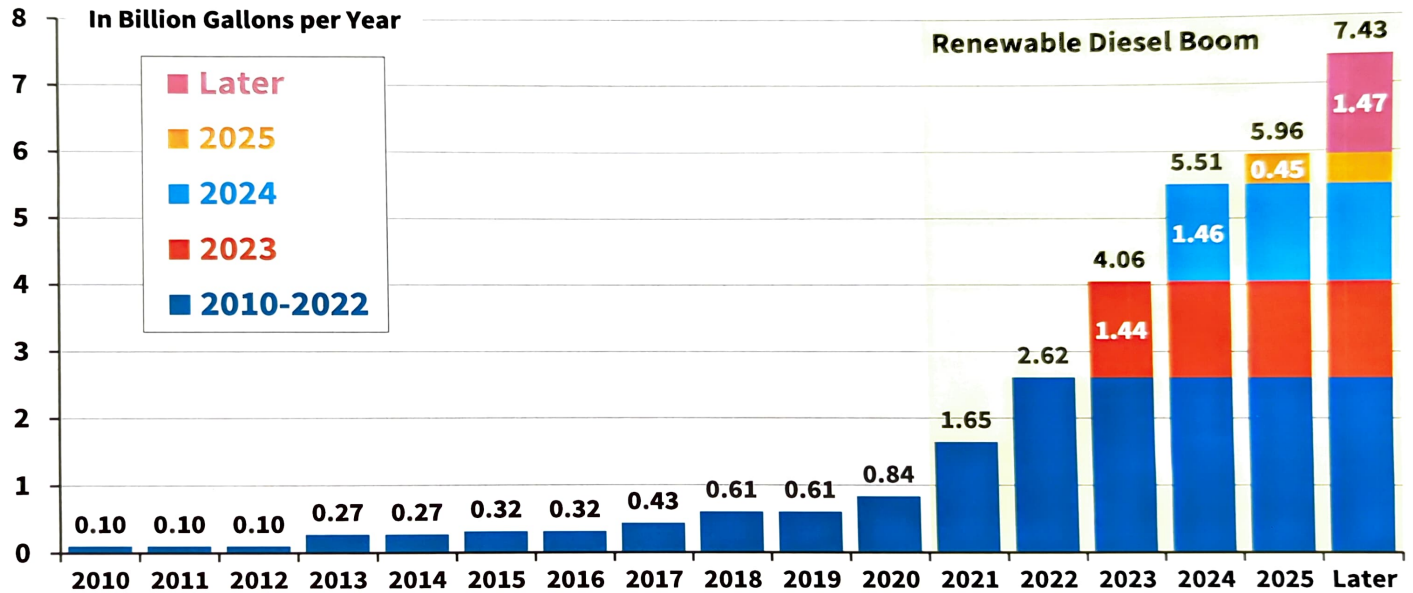


—●— Biodiesel —●— Renewable Diesel and Other Biofuels

Source: U.S. Energy Information Administration

Annual U.S. Renewable Diesel Nameplate Production Capacity

Actual for 2010 - 2022 and Projected for 2023 - 2025 and Later



A.5 – Comments Received During the Public Comment Period



REGION 8

DENVER, CO 80202

April 26, 2024

Mr. David Stroh
Manager, Permit Program
Division of Air Quality
North Dakota Department of Environmental Quality
4201 Normandy Street
Bismarck, North Dakota 58503

Re: Comments on PSD Permit for Epitome Energy, LLC – Grand Forks, ND

Dear David Stroh:

The Environmental Protection Agency Region 8 has completed its review of the Epitome Energy, LLC – Grand Forks Plant (Epitome) proposed Prevention of Significant Deterioration New Source Review permit. The public comment period for the Epitome permit runs from March 28, 2024, through April 27, 2024. The attached comments cover the body of the permit and the air quality modeling analysis completed for the proposed permit.

This permit action has been assigned to Julia Witteman and Catherine Collins. If you have any questions, or if you would like to schedule a meeting to discuss this matter further, please contact either Julia at Witteman.Julia@epa.gov or Catherine at Collins.Catherine01@epa.gov. We look forward to hearing from you and working with you on this permit.

Sincerely,

Adrienne Sandoval
Director
Air and Radiation Division

ENCLOSURES

1. Comments on Epitome Energy, LLC – Grand Forks Plant

cc: Jim Semerad

Comments on Epitome Energy, LLC – Grand Forks Plant

- 1) Table 1-1 on page 2 of the draft permit lists the control equipment to be used at the facility such as baghouses, mineral oil system, cyclones, etc. The draft permit does not include design and operating parameters to ensure performance and practical enforceability of the control equipment. EPA recommends that the draft permit include the appropriate design and operating parameters for the control equipment and appropriate monitoring, recordkeeping and reporting to ensure practical enforceability of the permit limits.
- 2) Sections 2.A and 2.B on pages 4 and 5 of the draft permit require the permittee to comply with “all applicable requirements” of the New Source Performance Standards subparts Dc, DD, IIII and JJJJ and the National Emission Standards for Hazardous Air Pollutants subparts GGGG, ZZZZ and DDDDD. EPA recommends that the permit incorporate by reference or identify the specific requirements of these subparts that are applicable to the permittee. EPA recommends adding to the permit the specific requirements of each NSPS and NESHAP subpart that the permittee is to comply with, and include all appropriate monitoring, recordkeeping, testing and reporting to ensure practical enforceability of the permit limits. If incorporating by reference, then EPA recommends including descriptive information, such as the title or number of the requirement, to ensure that any of the referenced material that applies to the facility is clear and is not reasonably subject to misinterpretation. Where only a portion of the referenced requirement applies then the permit should specify the relevant section.
- 3) Section 2.F: Emergency Engines on page 6 of the draft permit says that "for engines to be considered emergency stationary Reciprocating Internal Combustion Engine (RICE) under the RICE Maximum Achievable Control Technology rules (40 CFR Part 63 Subpart ZZZZ), engine operations must comply with the non-emergency operating hour limits as specified in the applicable subpart." If the permittee plans to consider these emergency engines (EU 55, 56 and 57) as emergency engines under the RICE MACT, then EPA recommends adding information to the permit stating such and include the appropriate RICE requirements and the appropriate monitoring, recordkeeping and reporting to ensure practical enforceability of the operating hourly limits.
- 4) Table 3.1: Permit Emission Limits on pages 7, 8, and 9 of the draft permit lists the emission limits for the different emission units but does not include any monitoring, recordkeeping, testing or reporting requirements. EPA recommends adding all appropriate monitoring, recordkeeping, testing and reporting requirements for all permit emission limits and requirements to assure compliance with the permit requirements.
- 5) Section 3.B: Solvent Loss Limit on page 10 of the draft permit contains the Volatile Organic Compounds solvent loss Best Available Control Technology (BACT) limit. Section 2.4.4 of the June 2023 permit application contains information on the proposed BACT selection and emission limit for control of VOC emissions from the extraction process. Table 2.7, on page 2.13 (pdf page 27 of 163) in this section of the June 2023 permit application shows seven BACT limits in the RACT/BACT/LAER Clearinghouse (RBLC) that are lower than the 0.15 gal/ton solvent loss

limit being proposed as BACT for this permit. The first and fourth paragraphs on page 2.14 (pdf page 28 of 163) of the June 2023 permit application both mention that the higher 0.15 gal/ton BACT limit was chosen because the lower 0.14 gal/ton BACT limits were for facilities in states with warmer climates “where the impact of the extreme winter weather conditions are less of an influential factor.” It is unclear why a colder climate would make it more difficult for Epitome to meet the lower 0.14 gal/ton BACT limit. EPA recommends providing, in more detail, a justification for why a 0.14 gal/ton BACT limit is not technically feasible. Additionally, if there are economic reasons for the selection of the BACT limit, these economic reasons should be clearly described in the top down BACT analysis. If there were economic reasons for the selection of the BACT limit, EPA recommends providing the economic justification for the selection of the BACT limit.

- 6) The permit does not appear to have appropriate monitoring, recordkeeping, testing and reporting for the VOC solvent loss BACT limit. EPA recommends adding all appropriate monitoring, recordkeeping, testing and reporting to ensure compliance with the VOC solvent loss BACT limit. Additionally, Table 3-2: Allowable Solvent Loss Ratio Upon Start-up on page 10 of the draft permit allows 18 months after startup of the facility to reach the proposed 0.15 gal/ton limit, which, in EPA’s experience, is an unusually long amount of time. EPA recommends reducing the time allowed after startup to achieve the VOC solvent loss ratio limit. If the 18-month period of time is appropriate, EPA recommends providing a justification for why that period of time is necessary.
- 7) Section 4: Emission Testing Requirements on page 11 of the draft permit requires initial performance testing of several emission units, but the permit does not require any subsequent periodic performance testing. EPA recommends adding periodic performance testing requirements for the emission units to the permit to assure compliance with the permit limits.
- 8) Sections 5.A and 5.B on page 13 of the draft permit requires the operation of “air pollution control equipment in a manner consistent with good air pollution control practices for minimizing emissions.” EPA recommends adding the good air pollution control practices or reference to the underlying regulation(s) into the permit so that the permit terms are enforceable.
- 9) Sections 5.E, 5.F and 5.G on pages 14 and 15 of the draft permit require the permittee to comply with “all applicable requirements” of NDAC 33.1-15-07, 33.1-15-08-01, and 33.1-15-17 for control of organic compound emissions, air pollution from internal combustion engines, and fugitive emissions, respectively. EPA recommends the permit incorporate by reference or identify in the permit any of these requirements that are applicable to the permittee and include appropriate monitoring, recordkeeping, testing and reporting to assure compliance with the permit requirements. If incorporating by reference, then EPA recommends including descriptive information, such as the title or number of the requirement, to ensure that any of the referenced material that applies to the facility is clear and is not reasonably subject to misinterpretation. Where only a portion of the referenced requirement applies then the permit should specify the relevant section.

- 10) The draft permit does not appear to have a particulate matter emission limit for the cooling towers but does contain a drift rate limit. In establishing the BACT limits for the cooling towers and in reviewing the RBLC there are many cooling towers that have both a drift rate limit and a particulate matter limit in terms of pounds per hour or tons per year. EPA recommends adding a particulate limit for the cooling towers, and any necessary monitoring, recordkeeping, testing and reporting to assure compliance with the limits into the permit.

- 11) The air quality modeling in the Air Quality Impact Analysis (AQIA) report asserts that no receptors are placed within the plant boundary as it is not ambient air, but no justification is provided as to how exactly this ambient air boundary will be established by the facility and if it is accurately represented in the modeling. The permit application does note of a proposed fence and signage to be put up around the facility, but no reference of this is present in the AQIA. Under 40 CFR 50.1(e), the definition of "ambient air" "means that portion of the atmosphere, external to buildings, to which the general public has access." EPA also released a Revised Policy on Exclusions from "Ambient Air" (December 2, 2019), which provides further insight on how to reasonably establish and justify the boundary of ambient air. Given that the AQIA for this project did not provide any justification or clarification on how ambient air is being established, EPA recommends adding this information to the report so that the modeling domain and receptor grid is appropriately defined.

- 12) The air quality modeling in the AQIA report represents the three cooling towers for the project, identified as emission points FS2A/FS2B/FS2C in Table 13, as point sources for input into the model. The June 2023 application for this project, however, has these pieces of equipment listed as "Area Source for Model (g/sec-m²)" (pdf page 139 of 163). EPA recommends that the AQIA verify that the model inputs are consistent with what was provided in the June 2023 application, and that any discrepancies or changes from the information provided in the June 2023 application be justified within the AQIA report.

- 13) The air quality modeling uses fixed background concentrations based on monitoring data collected at multiple locations around or before 2013. Background concentrations predict the total air quality concentration by representing the pollutant concentrations that are not included in the air quality modeling. 40 CFR part 51, Appendix W recommends using the most recent quality assured air quality monitoring data collected in the vicinity (i.e., monitor closest to and upwind) of the project to determine the background concentration. For many cases, the best starting point is use of the current design value for the applicable National Ambient Air Quality Standards (NAAQS) as a uniform monitored background contribution across the project area. Appendix W and EPA's Memorandum on the Additional Methods, Determinations, and Analyses to Modify Air Quality Data Beyond Exceptional Events¹ outline additional methods for determining representative background concentrations. EPA recommends adding information to the AQIA report to more clearly define the monitoring data used to determine the background concentrations (e.g., monitor names, dates, and calculations) and how the values align with EPA's air quality modeling guidance.

¹ Additional Methods, Determinations, and Analyses to Modify Air Quality Data Beyond Exceptional Events, April 2019, <https://www.epa.gov/air-quality-analysis/clarification-memo-additional-methods-determinations-and-analyses-modify-air>

A.5.i – Epitome Energy, LLC Response to Comments

EPA 4/26/24 Letter to NDDEQ on Epitome Energy LLC, Grand Forks, ND Air Permit to Construct

Comment #5:

Section 3.B: Solvent Loss Limit on page 10 of the draft permit contains the Volatile Organic Compounds solvent loss Best Available Control Technology (BACT) limit. Section 2.4.4 of the June 2023 permit application contains information on the proposed BACT selection and emission limit for control of VOC emissions from the extraction process. Table 2.7, on page 2.13 (pdf page 27 of 163) in this section of the June 2023 permit application shows seven BACT limits in the RACT/BACT/LAER Clearinghouse (RBLC) that are lower than the 0.15 gal/ton solvent loss limit being proposed as BACT for this permit. The first and fourth paragraphs on page 2.14 (pdf page 28 of 163) of the June 2023 permit application both mention that the higher 0.15 gal/ton BACT limit was chosen because the lower 0.14 gal/ton BACT limits were for facilities in states with warmer climates “where the impact of the extreme winter weather conditions are less of an influential factor.” It is unclear why a colder climate would make it more difficult for Epitome to meet the lower 0.14 gal/ton BACT limit. EPA recommends providing, in more detail, a justification for why a 0.14 gal/ton BACT limit is not technically feasible. Additionally, if there are economic reasons for the selection of the BACT limit, these economic reasons should be clearly described in the top down BACT analysis. If there were economic reasons for the selection of the BACT limit, EPA recommends providing the economic justification for the selection of the BACT limit.

Response:

The VOC Solvent Loss Limit was provided by the vendor as a manufacturer guarantee for this specific facility design for the Grand Forks location. It takes into account specific facility design and expected plant operation and maintenance, SSM events, and the local bean conditions (type, moisture content) for the specific facility location.

The vendor has estimated that the capital cost to the facility to meet a lower BACT limit of 0.14 gal/ton would be at least \$2 Million for equipment changes, additional equipment, and building/structure changes.

An economic evaluation of these additional costs is shown in the following table:

	Solvent Loss Limit (gal/ton)	Potential VOC (ton/year)	VOC Reduction (ton/yr)	Change to Capital Cost	Cost/Ton Reduction
BACT Limit based on Manufacturer Guarantee	0.15	556.4	--		
BACT Limit based on Lowest RBLC Entry	0.14	519.3	37.1	\$2,000,000	\$53,960

Based on the above analysis, the costs associated with facility lower BACT limit are economically prohibitive.

A.6 – Department Response to Public Comments

Response to Comments Received
by
The North Dakota Department of Environmental Quality
on
Draft Air Pollution Permit to Construct No. ACP-18210 v1.0
Epitome Energy, LLC
Grand Forks County, North Dakota

May 22, 2024

A public comment period was held regarding the above draft Air Pollution Control Permit to Construct (PTC) from March 28 through April 27, 2024. A summary of the comments received by the North Dakota Department of Environmental Quality (NDDEQ) and the response to each comment by NDDEQ are shown below.

Comments were received during the public hearing on April 23, 2024, and in writing. Verbal testimony was provided by six individuals and written comments were received from Region 8 of the Environmental Protection Agency (EPA R8) on April 26, 2024.

NDDEQ shared the EPA R8 comments with Epitome on April 30, 2024, and allowed them to respond to the comments received. Epitome provided a response to EPA R8 comment 5 on May 13, 2024. This response has been included in the record.

Verbal Comments Received During Hearing:

All six individual commentors who provided verbal testimony on April 23, 2024, expressed strong support for the Project. The commentors indicated how important the Project was for the Grand Forks area, for North Dakota, for local farmers, and the economy. The complete transcript of the hearing can be found in Appendix A.4.

Response to Verbal Comments:

Thank you for the comments and overall support for the proposed Project. NDDEQ generally agrees with the statements raised. The concerns expressed are outside the scope of the PTC, however, these concerns are important for North Dakota.

Written Comment No. 1:

Include operational parameters for the control equipment as well as appropriate monitoring, recordkeeping, and reporting in the PTC to ensure performance and practical enforceability.

Response to Written Comment No. 1:

The operational parameters of control equipment are established through compliance testing post-start-up of the facility and/or by following manufacture requirements for operation. Tested parameters are subsequently incorporated as monitoring, recordkeeping, and reporting requirements into the facility's future Title V permit to operate, serving as the basis for ongoing compliance verification.

Per PTC Condition 5.A. and 5.B., the facility is obligated to follow best management practices and to operate the control equipment in accordance with good air pollution control practices for minimizing emissions. This helps ensure adherence to regulatory standards until performance indicators can be established during testing and helps ensure the facility will follow the manufacturer's requirements for various other controls.

Operational parameter monitoring for particulate matter emissions from the facility's baghouses, cyclones, and/or filters will include, but may not be limited to, pressure drop monitoring and visual emission observations. The mineral oil system, and associated extraction equipment, is subject to 40 CFR Part 63 Subpart GGGG and shall comply with the monitoring, recordkeeping, and reporting set forth in that subpart.

Written Comment No. 2:

Include specific requirements of each NSPS and NESHAP subpart in the PTC to ensure practical enforceability.

Response to Written Comment No. 2:

NDDEQ's PTC lists all the NSPS and NESHAP subparts applicable to the facility. This format ensures clear readability and understanding of all applicable state and federal regulations for the facility and DEQ personnel. The AQEA in the permit package further outlines specific compliance requirements for the facility.

NDDEQ's experience as the Clean Air Act implementation and enforcement authority has shown that the level of incorporation by reference as written in the Permit to Construct requirements for NSPSs and NESHAPs including emission unit identification has been sufficient and useful to the applicant and public to determine what standard applies to the emission unit and how the source is to achieve compliance with each standard. NDDEQ will consider specifying which portions of the subject regulations apply in the future Title V permit to operate.

Written Comment No. 3:

Include RICE MACT requirements for Emergency Engines (EU 55, 56, and 57) to ensure practical enforceability of the operating hourly limits.

Response to Written Comment No. 3:

NDDEQ finds that providing reference to the applicable subpart is sufficient for the PTC. A condition will be incorporated in a future Title V permit to operate, such as *"For the emergency engines, records shall be maintained to differentiate between time operated for emergency purposes, maintenance/testing purposes, and other nonemergency purposes."*

Written Comment No. 4:

Include appropriate monitoring, recordkeeping, testing, and reporting requirements for all permit emission limits and requirements to assure compliance.

Response to Written Comment No.4:

Monitoring, recordkeeping, and reporting requirements for all emissions units subject to a NSPS or NESHAP are specified within the applicable subpart and are required to be followed. Initial emissions testing requirements are specified in Condition 4.A. of the PTC and are driven by NDDEQ's regulatory experience and potential emissions. Emissions points with low potential particulate matter emissions (e.g., less than 5 tpy) may demonstrate compliance with the proposed emissions limit by supplying manufacturer guarantees and by following manufacturer operational requirements. Routine, or periodic, emissions testing requirements will be incorporated in a future Title V permit to operate.

Additionally, per PTC Condition 5.A. and 5.B., the facility is obligated to operate the control equipment in accordance with good air pollution management and control practices. This helps ensure adherence to regulatory standards and compliance assurance with the permit requirements.

Written Comment No. 5:

Provide more detail on the justification for 0.15 gal/ton of VOC solvent loss as BACT instead of 0.14 gal/ton.

Response to Written Comment No. 5:

NDDEQ's determination of best available control technology (BACT) for Epitome was consistent with the control technology determined as BACT for two recently permitted soybean processing facilities in North Dakota. NDDEQ's adoption of 0.15 gal of solvent loss per ton of soybean processed (gal/ton) is also the same limit set forth in each of those two permits. Of note, neither of these two facilities have yet been able to demonstrate compliance with the BACT limit as initial operation has only just commenced for one, and one is still under construction. The BACT limit of 0.15 gal/ton is also consistent and within the range of BACT data available on the RACT/BACT/LAER Clearinghouse (RBLC) for this type of facility. NDDEQ's position on BACT, as the name reflects, is application of the control technology itself. How efficient or effective the control technology is (or is expected to be) is what determines the BACT rate. In other words, even with the same control technology the achievable rate can, and often does, vary. In instances where non-attainment may exist, the lowest achievable emissions rate (LAER) associated with the best available controls is warranted and required by law. In attainment areas, LAER is not warranted and BACT is to be reflective of other BACT determinations. Given the performance ranges identified in the RBLC and the determination of BACT at 0.15 gal/ton for the other two North Dakota permitted facilities, NDDEQ determined that 0.15 gal/ton BACT limit is reasonable.

Regardless of the above, NDDEQ worked with Epitome (who worked with the technology provider), to determine what the estimated increase (or change to) capital cost would be if the facility was re-designed to meet a 0.14 gal/ton limit versus the 0.15 gal/ton limit. The information provided indicates that an additional \$2 million would be required for equipment changes, additional equipment, and building/structure changes to meet a 0.14 gal/ton limit. Going from 0.15 gal/ton to 0.14 gal/ton would have the potential to reduce 37.1 tons per year of VOC. \$2,000,000 divided by 37.1 tons VOC equals approximately \$54,000 per ton VOC reduced for the incremental cost increase. NDDEQ does not consider approximately \$54,000/ton as an economically feasible reason to justify a limit of 0.14 gal/ton when the area in question is in attainment with all national

ambient air quality standards. It should also be noted that only looking at capital cost provides a conservative estimate of this incremental increase.

Lastly, unlike most conventional controls which typically experience an increase in operational cost with more pollution being reduced (e.g., wet gas scrubbers that increase liquid flow rate or chemical injection will see increased operating costs), minimizing solvent loss through solvent recovery will save Epitome operational costs. Therefore, it is in the inherent best economic interest of Epitome to achieve a rate lower than the proposed limit.

Written Comment No. 6:

EPA recommends justifying the 18-month period for achieving the VOC solvent loss BACT limit.

Response to Written Comment No. 6:

The proposed phase-in limit is necessary for a new soybean processing plant, which will consist of a series of interrelated operations from bean conditioning to flaking to extraction to the design and operation of the desolventizer-toaster. Each of these process steps can influence the overall solvent loss rate and each of these processes vary slightly from facility to facility. Unlike a conventional control technology or control approach (e.g., the control efficiency of a baghouse), there is no single value that readily represents the achievable emissions rate from this type of integrated process. There is a wide range in emissions performance levels for solvent loss from this industry in the RBLC.

The 18-month timeline for VOC from solvent loss is generally consistent with the 40 CFR Part 63 Subpart GGGG for hexane from solvent loss, which consists of the 6 calendar months for the initial startup period under 40 CFR 63.2850(c)(2) and a 12-month rolling average calculation requirement in Table 1 of 40 CFR 63.2850.

Epitome is limited to 0.2 gal/ton upon initial startup and for the first 6 months. Starting with the 7th month, Epitome will meet 0.15 gal/ton, on a per month basis going forward. 18-months from initial startup is needed since the limit is on a 12-month rolling average basis and the first 6-months at 0.2 gal/ton hinders the ability to show 12-month rolling average compliance until month 18. *For example, the month 14 limit of 0.167 gal/ton is calculated from the average of 4-months at 0.2 gal/ton and 8-months at 0.15 gal/ton, $(4 \times 0.2 + 8 \times 0.15)/12 = 0.167$.*

In addition, it is noted that Subpart GGGG does not limit solvent loss for the first 6-months, like NDDEQ has done in this permit. Subpart GGGG requires work practice standards and provides a schedule for compliance demonstration. In other words, Epitome is going beyond the regulatory standard by proposing to comply with the normal operation regulatory standard upon initial startup.

Written Comment No. 7:

EPA recommends adding periodic performance testing requirements for the emission units to the PTC to assure compliance with the permit limits.

Response to Written Comment No. 7:

PTC Condition 4.A. lists the initial emissions testing requirements upon completion of construction for the units involved in the Project. Periodic testing requirements will be incorporated into the facility's future Title V permit to operate to ensure ongoing compliance with emissions standards. The conditions and the periodic testing schedule will be dictated by the initial testing results.

Written Comment No. 8:

EPA recommends including references requiring good air pollution control practices for enforceability.

Response to Written Comment No. 8:

Condition 5.A. and 5.B. of the PTC are derived from Subpart A of 40 CFR 60 and 63.¹ The AQEA discusses applicability for these subparts in sections L. and V., respectively. Conditions 5.A. and 5.B. will become practically enforceable upon issuance of the final PTC.

Written Comment No. 9:

EPA recommends including specific requirements of NDAC 33.1-15-07, 33.1-15-08-01, and 33.1-15-17 in the PTC.

Response to Written Comment No. 9:

NDDEQ's PTC lists all the NDAC chapters and subparts applicable to the facility. This format ensures clear readability and understanding of all applicable state and federal regulations for the facility and DEQ personnel. The AQEA in the permit package further outlines specific compliance requirements for the facility.

NDDEQ's experience as the Clean Air Act implementation and enforcement authority has shown that the level of incorporation by reference as written in the Permit to Construct requirements for the NDAC air pollution control rules has been sufficient and useful to the applicant and public to determine what NDAC applies and how the source is to achieve compliance. NDDEQ will consider specifying which portions of the NDAC apply in the future Title V permit to operate.

Written Comment No. 10:

EPA recommends adding a particulate matter limit in addition to drift loss for cooling towers.

Response to Written Comment No. 10:

Historically, when appropriate, NDDEQ has permitted cooling towers with a design requirement to limit drift loss. This requirement is sufficient to ensure the cooling tower is constructed consistent with representations made in the permit application. In addition to drift loss, PM emissions from a cooling tower are governed by total dissolved solids (TDS) and circulation rate. In the current case of Epitome, the TDS value is estimated from the water quality data for the Grand Forks water treatment plant effluent, which will be used by the facility, and the circulation rate is a design value. Since PM emissions are largely affected by drift loss, a drift loss requirement is most pertinent. TDS and circulation rates will be tracked and used to calculate and report actual

¹ 40 CFR 60.11 and 40 CFR 63.6

emissions. Should reported emissions deviate from representations made in the application, the Department will consider if additional cooling tower requirements are warranted.

Contrary to EPA's statement that "many cooling towers have both a drift rate limit and a particulate matter limit in terms of pounds per hour or tons per year", the RBLC contains no such limitations. Upon a review of the RBLC database for cooling towers that were permitted in the last 5 years (since January 2019), none of the units reviewed had both PM limits and drift loss limits.

Written Comment No. 11:

Include justification or clarification on how ambient air is established in the AQIA.

Response to Written Comment No. 11:

The AQIA highlights that no receptors are placed within the plant boundary. In addition, it is also mentioned, that "*Ambient air is defined as air situated outside of a boundary (e.g., a fence), which restricts general public access to a facility or source. This exclusion ensures that the modeling analysis focuses on assessing the impact of emissions on the air quality in areas accessible to the public*". This definition of ambient air is in line with 40 CFR 50.1(e), also cited in the AQIA. Epitome proposes utilizing a fence around the plant boundary, signage, and remote monitoring devices in certain areas to preclude access to the general public². This information has been added to the AQIA.

Written Comment No. 12:

Verify the source type of cooling towers (EU FS2A, FS2B & FS2C) as either point sources or area sources.

Response to Written Comment No. 12:

As mentioned by the EPA, Pg. 139 of the application submitted by Epitome Energy contains a table with an "Area Source for Model" column. Upon consultation with Epitome, it was identified as a typographical error. Nowhere in the application is it stated that these units are area sources. Appendix A of the modeling report included with the application lists all the modeled source parameters for each unit and shows the specific point source parameters for these units. It should be noted that the modeling files submitted by the applicant also regarded these cooling towers as point source parameters.

The modeling analysis included with the June 2023 application identifies these units as point sources and is consistent with the NDDEQ analysis and AQIA.

Written Comment No. 13:

EPA comments on the representativeness of background concentrations used in air quality modeling.

Response to Written Comment No.13:

NDDEQ utilized fixed background concentrations that are considered reasonably representative of the entire state and are generally conservative. To demonstrate this, NDDEQ evaluated ambient concentrations across key locations in our state, including Bismarck, Fargo, Theodore Roosevelt

² Pg. 149 of PTC Application submitted by Epitome Energy in June 2023

National Park (TRNP), and Lostwood National Wildlife Refuge (NWR). These locations were chosen to represent a range of population densities and environmental conditions. Bismarck and Fargo are North Dakota's highest populated areas and are consistently the highest reading monitors. Theodore Roosevelt National Park and Lostwood NWR are lower population areas considered to be more true representations of background in our state.

Ambient data was pulled from the EPA Outdoor Air Quality data and averaged over the 5-year period from 2018-2022. An average of the ambient data is most representative of a background concentration. Design values, as recommended by the EPA, can be high values from days with wildfire smoke, which do not accurately represent the ambient background to be used in air quality modeling.

The results in the table below show that North Dakota's fixed ambient background concentrations³ are generally conservative and representative in comparison to the ambient air concentrations.

Parameter	PM ₁₀	PM _{2.5}		SO ₂		CO	NO ₂	
Averaging Period	24-hr	24-hr	Annual	1-hr	Annual	8-hr	1-hr	Annual
Monitoring Stations in North Dakota's Highest Population Areas – 5-Year Average (2018-2022)								
Fargo	12.44	7.54	5.58	3.11	0.84	-	33.61	4.17
Bismarck	19.45	6.99	6.46	11.11	0.41	221.28	34.56	4.71
Monitoring Stations in North Dakota's Lower Population Areas – 5-Year Average (2018-2022)								
TRNP	-	4.35	4.35	4.33	1.35	-	9.89	1.46
Lostwood NWR	11.36	-	-	-	-	-	-	-
Background	30.00	13.70	4.75	13.00	3.00	1149.00	35.00	5.00

Sources: <https://www.epa.gov/outdoor-air-quality-data/download-daily-data>
<https://www.epa.gov/outdoor-air-quality-data/monitor-values-report>

³ June 21, 2013, North Dakota Department of Health, Division of Air Quality - Air Quality Dispersion Modeling Analysis Guide. Available at: https://deq.nd.gov/publications/AO/policy/Modeling/ND_Air_Dispersion_Modeling_Guide.pdf