

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF AIR
JUNE 2011

Responsiveness Summary for the
Public Comment Period on the
Construction Permit Application from
Marquis Energy, LLC for an
Expansion of its Fuel Ethanol Plant near
Hennepin, Illinois

Site Identification No.: 155010AAJ
Application No.: 10110032

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INTRODUCTION

Marquis Energy, LLC (Marquis) has applied for an air pollution control construction permit for an expansion of its dry mill fuel ethanol production plant north of Hennepin . After review of the application, the Illinois Environmental Protection Agency (Illinois EPA) prepared a draft construction permit and held a comment period, with a public hearing, to receive comments on the proposed issuance of the requested permit.

Upon review of comments received during the public comment period and final review of the application, the Illinois EPA has determined that the application meets the standards for issuance of a construction permit. Accordingly, on June 14, 2011, the Illinois EPA issued a construction permit to Marquis for the proposed expansion of the plant. The expansion must be constructed and operated in accordance with applicable regulations and the terms and conditions of the issued permit.

DESCRIPTION OF THE PROPOSED PROJECT

Marquis has proposed an expansion of its fuel ethanol plant, which produces ethanol for blending with gasoline. The proposed expansion would have a nominal capacity of 140 million gallons ethanol per year and would essentially double the production capacity of the plant. Like the existing plant, the expansion would produce ethanol by batch fermentation of ground corn, followed by processing to separate out and purify the ethanol. The stillage material remaining after the ethanol production would be dried and sold as animal feed. Natural gas will be used as the fuel in the boilers that provides the steam for the ethanol production process and the dryers.

The expansion would generally be designed to function as a stand-alone plant. In particular, the expansion would have new equipment and facilities to perform activities such as grain receiving and storage, grain milling, mash preparation, fermentation, distillation of stillage, feed drying, storage and loadout of feed, additional storage of ethanol, and natural gas fired boilers. These new facilities and their control equipment would be similar to those at the existing plant.

The expansion and original plant would have certain operations that are shared. For the expansion, ethanol would be stored in either existing holding tanks or the main storage tanks. The ethanol produced by the expansion would be shipped out to customer using the existing loading racks of original plant. The expansion would also provide redundancy and backup capability for certain operation for the original plant, including boilers, grain receiving and storage and feed loadout operations.

COMMENT PERIOD AND PUBLIC HEARING

The Illinois EPA Bureau of Air evaluates applications and issues construction permits for sources of emissions. An air pollution control permit application must appropriately address compliance with applicable air pollution control laws and regulations before a permit can be issued. Following its initial review of the application submitted by Marquis, the Illinois EPA Bureau of Air made a preliminary determination that the application for the expansion project

met the standards for issuance of a construction permit and prepared a draft permit for public review and comment. The public comment period began on February 18, 2011, with the publication of a notice in the LaSalle New Tribune. A subsequent notice was published in the Putnam County Record on February 23, 2011. When a public hearing was scheduled on the proposed project, additional notices were published in these papers on March 30, April 6 and April 13, 2011. A public hearing was held on May 17, 2011 at the Putnam County High School in Granville to receive oral comments regarding the application and draft construction permit for the proposed project. The hearing was attended by about 90 members of the public, including individuals who currently work at the Marquis plant or provide services to the plant. The comment period for the proposed expansion project closed on June 1, 2011.

AVAILABILITY OF DOCUMENTS

Copies of the issued permit and this Responsiveness Summary are available through the following means:

1. To obtain a printed copy of the documents by mail and free of charge, contact the Illinois EPA by telephone, facsimile or electronic mail:

Illinois EPA
Bradley Frost, Office of Community Relations
217-782-7027 Desk Line
1-888-372-1996 Toll Free Environmental Helpline
217-782-9143 TDD
217-524-5023 Facsimile
brad.frost@illinois.gov

2. View the documents at one of the following repositories:

Illinois EPA – Peoria
Regional Office
5407 North University
Peoria, Illinois 61614
309/693-5463

Illinois EPA
Bureau of Air, Permits
1021 North Grand Avenue, East
Springfield, Illinois 62794
217/782-7027

Electronic copies of documents will also be posted and become available on the Internet:

www.epa.gov/region5/air/permits/ilonline.htm (look under All Permit Records (sorted by name), State Construction Permit, New).

COMMENTS WITH RESPONSES BY THE ILLINOIS EPA

The following addresses comments that expressed concerns about the proposed project or the draft permit, accompanied by the responses by the Illinois EPA. The majority of individuals or organizations that spoke at the public hearing or submitted written comments on the proposed project supported the proposed project. Reasons given

included the absence of adverse environmental impacts from the increased emissions with the expansion and the economic benefits for people living and working in the area and for local economy generally. Benefits for the national economy and the country's energy resources were also noted.

1. As there is a National Ambient Air Quality Standard (NAAQS) for PM_{2.5}, the Illinois EPA must protect human health and welfare and insure non-degradation of air quality for PM_{2.5} in accordance with 35 IAC Part 243, Air Quality Standards. However, the Illinois EPA has not evaluated the impacts of the proposed project on ambient air quality PM_{2.5}.

In the permit for the proposed expansion, the Illinois EPA has appropriately addressed the emissions of PM_{2.5} from this project and potential impacts on air quality. This has been done by setting limits on emissions of particulate matter to assure that this project is not a major source for particulate matter. These limits are accompanied by compliance procedures, including requirements for emission testing, emissions monitoring, operational monitoring and recordkeeping, to verify compliance with these limits and to confirm that control measures for emissions of particulate matter are appropriately implemented by Marquis on an ongoing basis.

Dispersion modeling is not needed for this project to quantify its potential impacts on PM_{2.5} air quality. As explained in more detail in later responses to comments, this is because the Marquis plant is a modern ethanol plant whose emissions are and must be well controlled, with steam for the plant supplied by natural gas-fired boilers, located in rural area in Illinois. Accordingly, dispersion modeling is not needed to conclude that the plant with the proposed expansion would not be a threat to air quality for PM_{2.5} and public health. Dispersion modeling is also not required for the project by 35 IAC Part 243, which does not require such modeling as part of permitting, and only sets forth Illinois' air quality standards for different pollutants.

2. The draft permit would not set limits for the PM_{2.5} emission of the proposed project. The use of PM₁₀ as a surrogate for PM_{2.5} is no longer appropriate since sufficient PM_{2.5} measurement methods are now available and the necessary tools to calculate the emissions of PM_{2.5} adequately model projected ambient impacts have been developed.¹ Therefore, the draft permit would be legally and technically insufficient and would not meet the requirements of 35 IAC 243.102.

The draft permit for the proposed expansion would have set limits that addressed emissions of PM_{2.5} as it contained limits for emissions of PM₁₀ from various operations that are part of the expansion. This is because PM_{2.5} is a subset of PM₁₀. Accordingly, the limits in the draft permit for emissions of PM₁₀ would have also served to constrain or limit emissions of PM_{2.5}. This made been made explicit in the issued permit, that is, in the issued permit, the relevant conditions set limits for various operations at the plant that specifically apply to emissions of PM₁₀ and

¹ See 76 FR 28646-28661 (May 18, 2011) Final Rule – Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM_{2.5}); Final Rule To Repeal Grandfather Provision.

PM_{2.5}, i.e., PM₁₀-PM_{2.5}.² As the plant’s emissions of PM_{2.5} and PM₁₀ are controlled by the same control measures, different limits for PM_{2.5} and PM₁₀ are not needed in the permit to address different sets of control measures.

This approach is not contrary to 35 IAC 243.102, which does not direct the nature and content of the conditions in construction permits.³ The nature of the conditions that should be included in construction permits is governed by Section 39(a) of the Environmental Protection Act, which provides that “The Agency may impose such conditions as may be necessary to accomplish the purposes of the Act.” As PM_{2.5} is a subset of PM₁₀, conditions in the construction permit that will serve to assure that the proposed expansion is not a major project for purposes of the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, based on its emissions of PM₁₀, also will serve to assure that the expansion project is not a major project based on its emissions of PM_{2.5}.⁴

- Background levels of PM_{2.5} air quality in the area around Hennepin, as monitored by the Illinois EPA, are elevated.⁵ There is not a sufficient margin for the additional air quality impacts from the proposed expansion.

This comment does not demonstrate that the expansion of the Marquis plant will pose a threat to PM_{2.5} air quality. It also does not show that PM_{2.5} air quality in the Hennepin area is elevated. Rather the ambient air quality data collected by the Illinois EPA, as cited in this comment, indicates that air quality in Central Illinois is better than in the more developed Greater Chicago and MetroEast areas of Illinois.

² The issued permit also explicitly addresses the hierarchy for testing of particulate emissions (See new Condition 1.2(c).) As identical limits apply, if emission testing for filterable and condensable particulate by appropriate USEPA test methods shows compliance, further measurements for emissions of filterable PM₁₀ and PM_{2.5} are not needed to show compliance. Similarly, if emission testing for filterable PM₁₀ and condensable particulate by appropriate methods shows compliance with limits for PM₁₀, measurements for emissions of filterable PM_{2.5} are not needed to show compliance.

³ 35 IAC 243.102(d) provides that Marquis would be subject to enforcement under Illinois’ Environmental Protection Act if emissions of PM_{2.5} from its Hennepin plant were to cause or contribute to a violation of the PM_{2.5} NAAQS. The issuance of permits for the plant would not shield Marquis from such an enforcement action.

⁴ The approaches taken in the both the draft and issued permits are also not inconsistent with directives of the USEPA with respect to PM_{2.5} emissions. The relevant USEPA guidance provides that states must address emissions PM_{2.5} when considering applicability of PSD to a proposed project. However, state permitting authorities retain discretion as to the form of emission limits when issuing permits for projects that are not major.

⁵

PM _{2.5} Concentrations from Ambient Monitoring Stations near Hennepin (µg/m ³)*						
Year	Oglesby (La Salle County, pop. 111,509)		Normal (McLean County, pop. 150,443)		Peoria (Peoria County, pop. 183,433)	
	Daily (24-hour) 98th Percentile	Annual Mean	Daily (24-hour) 98th Percentile	Annual Mean	Daily (24-hour) 98th Percentile	Annual Mean
2001	28.9	14.45	32.4	14.79	36.4	13.94
2002	31.1	14.77	25.7	12.85	33.6	13.88
2003	30	13.05	33.8	13.15	35.2	13.67
2004	24.5	11.38	26	11.46	31.4	12.84
2005	32.8	14.03	43.2	13.41	35.8	14.5
2006	26	11.76	23.8	11.42	27.4	12.1
2007	30.9	11.73	33.3	12.34	34.7	13.04
2008	22.5	10.8	24	10.68	27	11.19

* Measured PM_{2.5} concentrations above or near the NAAQS for PM_{2.5} (i.e., 35 µg/m³, 98th percentile of 24-hour average concentrations, and 15µg/m³ annual average) are shown in bold-face type.

Moreover, the cited data shows that the Marquis plant does not and will not pose a threat to PM_{2.5} air quality. In particular, to show that the Marquis plant is a threat to PM_{2.5} air quality, this comment refers to the monitored air quality data for three locations in Central Illinois, Peoria, Oglesby and Normal. The monitoring at all three locations shows attainment of the PM_{2.5} NAAQS, with Peoria having the highest ambient levels of PM_{2.5}. Peoria is an industrial city with a population of over 100,000. Archer Daniels Midland also has a corn ethanol plant with coal-fired boilers in Peoria.⁶ Accordingly, the fact that Peoria is in attainment for the PM_{2.5} NAAQS, as shown by the monitoring conducted for Peoria, shows that the Marquis plant does not pose a threat to air quality. As compared to Peoria, Hennepin is a rural area, with a population of less than 1000, so background levels of PM_{2.5} in Hennepin are lower than in Peoria. As the Marquis plant is a new plant, with natural gas-fired boilers, its air quality impacts should be no greater than the existing Archer Daniels Midland plant in Peoria.⁷

In addition, the comment does not address the improvements in PM_{2.5} air quality in Illinois that have occurred and will continue to occur.⁸ PM_{2.5} air quality in Illinois is improving due to measures that are being taken to reduce emissions from existing sources to bring areas across the nation that are nonattainment for the PM_{2.5} NAAQS, including the Greater Chicago and St. Louis MetroEast areas, into attainment. These measures also result in overall improvements in air quality that benefit attainment areas like Central Illinois. As such, the margin for new development in Central Illinois, including the expansion of the Marquis plant, is greater than suggested in this comment. This is directly shown by the data collected in 2009 and 2010.^{9, 10} The margin will continue to grow as new regulatory

⁶ Archer Daniels Midland’s ethanol plant in Peoria is located near downtown Peoria at 1 Edmund Street, only about two miles south of the Illinois EPA’s ambient monitoring station at 613 NE Jefferson Street in Peoria.

⁷ Attainment of the PM_{2.5} NAAQS is also shown by the monitoring conducted by the Illinois EPA in Decatur, where Archer Daniels Midland also operates a very large corn and soybean processing complex. This complex, which is also supported by large coal-fired boilers, includes corn wet milling, and production of corn sweeteners and fuel ethanol.

Recent PM _{2.5} Concentrations from the Ambient Monitoring Stations in Decatur (µg/m ³)				
Year	Daily (24-hour) 98th Percentile		Annual Mean	
	Year	3-Yr Ave	Year	3-Yr Ave
2009	21.6	27.8	11.0	12.3
2010	22.1	23.4	12.2	11.7

⁸ Because of these improvements, much of the data cited by this comment is no longer reflective of current air quality. Certainly, the cited data that is more than five years old is only of interest from a historical perspective.

⁹

Recent PM _{2.5} Concentrations from Ambient Monitoring Stations near Hennepin (µg/m ³)												
Year	Oglesby (La Salle County, pop. 111,509)				Normal (McLean County, pop. 150,443)				Peoria (Peoria County, pop. 183,433)			
	Daily (24-hour) 98th Percentile		Annual Mean		Daily (24-hour) 98th Percentile		Annual Mean		Daily (24-hour) 98th Percentile		Annual Mean	
	Year	3-Yr Ave	Year	3-Yr Ave	Year	3-Yr Ave	Year	3-Yr Ave	Year	3-Yr Ave	Year	3-Yr Ave
2009	26.0	26.4	10.9	11.1	22.4	26.6	10.1	11.1	23.9	28.5	10.7	11.6
2010	29.0	25.8	9.5	10.4	25.0	23.8	10.6	10.5	26.0	25.6	9.5	11.1

¹⁰ This comment also does not accurately present PM_{2.5} air quality as compared to the NAAQS. This is because both the 24-hour and annual NAAQS apply as an average over three years, rather than in an individual year. This acts to reduce

programs, such as the federal Clean Air Interstate Rule, require further reductions in emissions from existing sources.

4. The draft permit would fail to protect public health and welfare due to the lack of emission limits to address the impact of direct filterable PM_{2.5} emissions, condensable filterable PM_{2.5} emissions and formation of PM_{2.5} from emissions of precursor pollutants from the plant. The permit must include enforceable PM_{2.5} emission limits to protect public health and insure that the proposed project will not cause or contribute to the violation of the PM_{2.5} NAAQS.

The permit would appropriately protect air quality for PM_{2.5}. The permit would set limits for emissions of filterable and condensable particulate from the plant, as well as limits for emissions of NO_x and SO₂, which are precursor pollutants to the formation of PM₁₀ and PM_{2.5} in the atmosphere. The permit would also require effective operation of the control measures for emissions of particulate matter, including PM_{2.5}. As already discussed, limits for PM_{2.5} emissions that are separate and different from those for PM₁₀ emission are not needed to address the plant's PM_{2.5} emissions.

5. Other state permitting agencies have included enforceable PM_{2.5} emission limits in construction permits for fuel ethanol plants. For example, refer to a draft permit prepared by the Kansas Department of Health and Environment for a plant proposed by Abengoa Bioenergy Biomass.¹¹

In fact, the draft permit for the proposed Abengoa project in Hugoton, Kansas, cited in this comment, addresses emissions of PM_{2.5} in a manner that is similar to that taken in the construction permit issued for the proposed expansion. In general, the draft permit for the Abengoa project would not set unique limits for emissions of PM_{2.5}. Rather, it sets identical limits for emissions of PM, PM₁₀ and PM_{2.5}. The exception is emissions from the four large solid fuel-fired boilers at the proposed Abengoa plant, for which separate and different limits are set for PM, PM₁₀ and PM_{2.5}. However, the Marquis plant does not have solid fuel-fired boilers. It also does not produce both fuel ethanol and electricity for sale, as would the proposed Abengoa plant.¹² Accordingly, the circumstances that led the Kansas Department of Health and Environment to set specific limits for emissions of PM_{2.5} are not present for the proposed expansion of the Marquis plant.¹³

variation in PM_{2.5} levels from year to year compared to the NAAQS. Accordingly, the presentation of air quality data in this comment overstates the highs and understates the low values of PM_{2.5} air quality as compared to the NAAQS .

¹¹ See, e.g., Abengoa Bioenergy Biomass of Kansas, LLC Draft Construction Permit, http://www.epa.gov/region07/air/nsr/archives/2011/draftpermits/abengoa_draft_psd_permit.pdf. Also, Indiana Department of Environmental Management Ethanol Fact Sheet, http://www.in.gov/idem/files/factsheet_ethanol.pdf.

¹² The Abengoa plant in Hugoton, Kansas, as described by the draft permit prepared for that project, would entail both a fuel ethanol plant and a steam electric power plant fired with biomass. As proposed, the plant would have four biomass boilers, each with a nominal capacity of 450 mmBtu/hour, and a total generating capacity of 120 MWe.

¹³ The other reference cited by this comment for the premise that other states issue construction permits that explicitly limit emissions of PM_{2.5} from ethanol plants is a general, two page fact sheet prepared by the Indiana Department of Environmental Management (IDEM) generally discussing permitting of fuel ethanol plants in Indiana. It does not show how construction permits for fuel ethanol plants are actually issued by IDEM.

6. To protect public health and insure that the proposed project will not cause or contribute to the violation of the PM_{2.5} NAAQS, the permit must insure that all emissions of precursors of PM_{2.5} are minimized by requiring the lowest achievable levels of emissions rates for NO_x and SO₂ from all emissions points. Flare design and management must be reviewed to insure optimal operation and minimal use unless under upset conditions. All stationary and fugitive sources of condensable and direct particulate matter must be at the lowest achievable rates. The control levels must be established in conjunction with monitoring and modeling demonstration to insure that public health and welfare is protected in accordance with 35 IAC 243.104.¹⁴

This comment does not provide a legal basis for the actions that are requested. In Illinois, applicable law and practice would only provide for case-by-case determinations of emission limits and control requirements for the proposed expansion, as generally requested by this comment, if the project were a major construction project pursuant to the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21. The proposed expansion of the Marquis plant is not a major project pursuant to the PSD rules.

Even though the proposed plant is not subject to PSD, the permit does include requirements that control measures be operated for effective control of emissions, separate and apart from requirements in the permit that limit emissions of the proposed expansion so that it is not a major project. Given the production capacity of the existing plant and the proposed expansion, very effective control of emissions is needed to achieve status as a non-major project, which is not subject to the PSD rules.

7. The Illinois EPA did not evaluate the combined impacts the Marquis plant on local ambient air quality considering impacts from other sources in the area, as required by 35 IAC 243.104 to protect air quality for PM_{2.5}. It is likely that PM_{2.5} air quality is worse in the Hennepin area than in the areas cited in my comments, in which monitoring is conducted. This is because of the impacts of nearby sources that were not considered by Illinois EPA when preparing the draft permit. These nearby sources include Dynegey's coal-fired Hennepin Power Station (306 MW), the Algonquian Ethanol plant near Princeton, the municipal power plants operated by the City of Princeton's (37 MW) and the City of Peru (44 MW), Dynegey's Oglesby Power Station (70 MW), and the Patriot Renewable Fuels plant in Annawan.

The only source identified in this comment that is near the Marquis plant and that is of potential concern for combined air quality impacts is Dynegey's coal-fired Hennepin Station, which is located about one mile north of the plant.¹⁵ However,

¹⁴ 35 IAC 243.104, Nondegradation, provides "Existing ambient air quality which is better than the established ambient air quality standards at the date of their adoption will be maintained in its present high quality. Such ambient air quality shall not be lowered unless and until it is proved to the Illinois Environmental Protection Agency (Agency) that such change is justifiable as a result of necessary economic and social development and will not interfere with or become injurious to human health or welfare."

¹⁵ The other plants identified in this comment are all located more than 10 miles from the Marquis plant, or in the case of Algonquian Ethanol, were never constructed, so are not of concern for combined air quality impacts. Moreover, the

Illinois' rural coal-fired power plants do not pose concerns for local impacts on air quality. This is because of the particulate matter control equipment on the boilers, the extent of the plant property and the heights of the boiler stacks.¹⁶

8. Illinois EPA has not established that issuance of the draft permit will not cause degradation of air quality for PM_{2.5} including violation of applicable NAAQS due to the combined impacts of other sources. The sources identified in my comments are located near the Marquis plant and would also impact local air quality. Illinois EPA should require PM_{2.5} modeling and PM_{2.5} monitoring to insure that the Marquis plant has not or will not cause or contribute to violations of the PM_{2.5} NAAQS.

Given the nature of the proposed expansion and its emissions, as would be constrained by the construction permit that has been issued for this project, modeling is not needed to verify that it is not a threat to the PM_{2.5} NAAQS. As already discussed, large fuel ethanol plants are located in major cities in Central Illinois that comply with the PM_{2.5} NAAQS.

9. USEPA's *Compilation of Air Pollutant Emission Factors*, AP-42 (AP-42) was improperly used to estimate emissions of hazardous air pollutants (HAPs), including acetaldehyde, from the flares at the Marquis plant. In AP-42, USEPA speciates HAP emissions based on the combustion of alkanes (straight chain hydrocarbon compounds). It is not appropriate for speciation of emissions from the combustion of oxygenated fuels. Application of the AP-42 emission factor results in substantial underestimation of the emissions of acetaldehyde and other products of incomplete combustion of oxygenated fuels from the proposed project. Consequently, the emissions of acetaldehyde set forth in the draft permit are substantially underestimated.

This comment does not identify a flaw in the calculations of the emissions of acetaldehyde and other combustion-related HAPs from the flares at the Marquis plant. In fact, USEPA's *Compilation of Air Pollutant Emission Factors*, AP-42, does not provide speciated information for the HAP emissions from flares "based on the combustion of alkanes," as indicated by this comment. Indeed, AP-42 does not provide any speciated data for HAP emissions from flares. Accordingly, emissions of HAPs from the flares at the Marquis plant could not have been estimated based on AP-42, as indicated by this comment.

However, in response to this comment, the Illinois EPA has further considered the limits in the draft permit for emissions of acetaldehyde from the flares at the plant. It was concluded that the limits in the draft permit for ethanol loadout might not have adequately accounted for acetaldehyde emissions from the loadout flares. Accordingly, the limits for acetaldehyde in the issued permit are higher than those in the draft permit. Compensating reductions were made to the limits for the

municipal power plants identified in this comment and Dynegy's Oglesby Station are all peaking or backup power plants, which do not operate routinely.

¹⁶ In addition, the particulate matter control equipment on the boilers at Dynegy's Hennepin power station is to be upgraded with fabric filter baghouses. (See Construction Permit 07020036, Issued May 2007.)

fermentation operations so that the overall emissions of acetaldehyde from the new facilities that are part of the expansion have not been increased.

By way of background, emissions of organic material potentially occur by two routes in a flare or afterburner. The first route relates to the organic compounds in the inlet stream to the device that are being targeted for control, some fraction of which are not controlled and pass through to the atmosphere. The second route is as products of incomplete combustion of the organic compounds in the inlet stream to the device and the fuel burned in the device. The second route, products of incomplete combustion, is relevant for the loadout flares at the Marquis plant. This is because they control vapors displaced from the loadout of ethanol, which are composed of ethanol, natural gasoline and gasoline, rather than a process stream that contains acetaldehyde as one of its constituents. As emissions of acetaldehyde from the flare are due to products of incomplete combustion, they are expected to be insignificant or negligible and make up only a very small fraction of the emissions of organic material from the flares.¹⁷ Nevertheless, it is necessary to account for acetaldehyde emissions from the loadout flares.

Upon further consideration it was concluded that more appropriate values for the permitted acetaldehyde emissions of the flares are 0.066 tons per year (tpy) for both the expansion and the existing plant, as compared to 0.002 and 0.012 tpy, respectively, in the draft permit. These limits are more appropriate values for negligible emissions of a HAP such as acetaldehyde. They are 15 percent of the value that is used by the Illinois EPA in permitting for negligible emissions of volatile organic material (VOM) from emission units or operations that operate on a continuous or regular basis.

10. The Illinois EPA has not provided technical information on the construction and management and control systems for the flares to enable the public to determine if the high control efficiencies for the flares relied upon in the draft permit are appropriate.

The Illinois EPA clearly identified the “basis” for the control efficiency for the flares relied upon in the permitting of the proposed expansion. As was indicated in the draft permit, the loadout flares at the Marquis plant must be designed and operated to satisfy the applicable requirements for flares established by USEPA at 40 CFR 60.18. Fulfillment of these requirements is commonly considered to provide a minimum of 98 percent control of the organic compounds in the waste gas being sent to a flare.¹⁸ The control efficiency in actual practice may be significantly higher than 98 percent.¹⁹

¹⁷ As already discussed, in AP-42, USEPA does not provide an emission factor for acetaldehyde emissions from flares. This suggests that the acetaldehyde emissions of flares have not been considered to merit investigation and testing. Instead, investigations have focused on the efficiency with which the organic compounds in the waste gas are controlled.

¹⁸ Achievement of 98 percent control efficiency should not be considered a “high control efficiency” for a flare. As discussed, this is a minimum control efficiency for a properly operated flare. The efficiency in actual practice may be significantly higher. In the context of the flares at the Marquis plant, a high control efficiency would be one that is not supportable simply by compliance with 40 CFR 60.18, for example, a control efficiency of 99 or 99.5 percent.

¹⁹ USEPA has not further refined its requirements for flares to identify design and operation criteria that provide levels of control efficiency higher than 98 percent. Except as related to certain flares that handle waste gas that contain at least 8 percent hydrogen by volume, USEPA has also not further refined its requirements for flares to address the nature of the

Design and operation of the flares at the Marquis plant to fulfill these requirements is a straightforward matter. The loadout flares are used to control the vapors that are displaced from the transport tanks during the loadout of ethanol. This results in steady flow of waste gas to a flare, as dictated by the pumping rate during loadout. The composition of the waste gas is also circumscribed because vapors of known materials, as present in the transport tank, are being flared. In this regard, the circumstances of the flares at the Marquis plant are very different from those at petroleum refineries, where flares are used to control waste gas from process upsets. The flow rate of waste gas during process upsets can vary greatly as excess pressure in the affected unit is reduced. The composition of the waste gas may also vary based on which particular unit at a refinery is experiencing the upset.²⁰

11. The composition of oxidizer exhaust where ethanol is combusted is approximately 10 percent acetaldehyde. This data demonstrates that combustion of oxygenated fuel produces high levels of oxygenated HAPs. The oxidizer is a more controlled combustion environment than a flare so a flare would be likely to produce substantially more oxygenated products of partial combustion than the oxidizer. As such, the composition of flare gas set forth in the draft permit is grossly inconsistent with any scientifically expected value for combustion of ethanol. Acetaldehyde is one of the primary combustion by products of ethanol combustion. Since the flare is a much less efficient combustion device than the oxidizer, it should be assumed that all the flare organic emissions are HAPs and 100 percent acetaldehyde until Marquis Energy can demonstrate using USEPA reference methods that a smaller value is justified.²¹

The analysis underlying this comment is flawed and does not support the approach to quantification of acetaldehyde emission from flares that is suggested. Thermal oxidizers are commonly used at ethanol plants to control the organic material emissions from the feed dryers. Acetaldehyde is present in the emission streams from these dryers prior to control by the oxidizer. This is because acetaldehyde is formed during certain steps in the chemical and biological processes by which ethanol is formed and decomposes. Accordingly, oxidizers on feed dryers directly serve as control devices for emissions of acetaldehyde. This is not the case for ethanol loadout. For ethanol loadout, acetaldehyde is present only as a product of incomplete combustion. Thus, the level of acetaldehyde generally present in the exhaust of oxidizers at ethanol plants, even if it were properly characterized by this comment,²² is not relevant to the emissions of acetaldehyde from the loadout flares at the Marquis plant.

waste gas stream that is being flared. In other words, USEPA has not suggested that different requirements should be met by a flare at an ethanol plant, where the flared waste gas contains ethanol, as compared to flares on other types of emission units with waste gas streams that do not contain ethanol.

²⁰ Because of the variation in the flow rate and composition of waste gas sent to flares at petroleum refineries, there has been concern that those flares may at times actually be operating with control efficiencies that are lower than the level being used for determination of emissions of organic material.

²¹ See Martin, Lumbrellas & Rodriguez, "Testing Flare Emission Factors for Flaring in Refineries." <http://www.epa.gov/ttnchie1/conference/ei12/poster/martin.pdf>. ("The flaring process can produce different pollutants: SO₂, NO_x, CO, NMVOC, CH₄ and CO₂. They depend on two main factors: the waste gas composition sent to the flame and the combustion efficiency.")

²² Emission testing in October 2008 for the feed dryers at the existing Marquis plant showed that acetaldehyde constituted only about 5 percent of the measured emissions of organic material (0.1 lbs/hr compared to 1.96 lbs/hr).

This comment is also flawed as it presumes that flares are less efficient than oxidizers. In fact, flares are often considered more efficient than oxidizers because they are used on gas streams that are combustible.²³ Finally, the paper by J. Martin and others cited in the comment is not relevant to the flares at the Marquis plant. The paper addresses flaring at petroleum refineries, focusing on emissions of carbon dioxide and methane, i.e., substances other acetaldehyde.^{24, 25}

12. As the permitted VOM emissions from flaring would be over 24 tons per year (tpy), proper calculation of flare emissions would add 12 tpy of acetaldehyde to the existing 10 tpy for each of the new and old plants making the original plant a major source of HAPs and the proposed expansion a major source of HAPs.

This comment does not show that either the expansion or the existing plant is a major source for HAP emissions. The analysis underlying this comment is flawed in several respects. First, the VOM emissions from the ethanol loadout operation include both the captured emissions, which are flared, and the uncaptured emissions, from leaks from the system that collects displaced vapors and sends them to the flare. Both captured/controlled and uncaptured VOM emissions are accounted for in the emission limits in the permit for loadout, with uncaptured emissions making up the majority of the VOM emissions. At most, the concerns about acetaldehyde emissions from flaring expressed by this comment would involve the ethanol emissions that are captured and are actually flared. Second, the comment does not show that the emissions of acetaldehyde would constitute half of the VOM emissions from the captured/controlled emissions. As discussed, acetaldehyde would make up only a small part of the VOM emissions from the flare, most of which would be ethanol and other organic compounds present in the displaced vapors. In this issued permit, the presence of incidental acetaldehyde emissions from the loadout flares is more than adequately addressed.

13. As explained in my previous comments, if properly determined, the acetaldehyde emissions from the expansion would be more than 10 tpy. The emissions of the existing plant would also be more than 10 tpy. This would make the proposed expansion a major source of HAPs. Similarly, the original plant is a major source of HAPs. As such, a case-by-case determination of Maximum Available Control Technology (MACT) must

²³ There is a fundamental difference in the nature of flares and oxidizers and the types of emission units and exhaust streams at fuel ethanol plants on which they are used. Flares are used on combustible gas streams, which must only have a source of ignition to burn. Oxidizers are used on gas streams that are not directly combustible, for which additional thermal energy must be added in the oxidizer to maintain stable combustion, by use of supplemental fuel and recovery of heat in the exhaust from the oxidizer. Accordingly, the performance of oxidizers is not inherently better than that of flares, instead being dependent upon the level of efficiency that an oxidizer is designed and operated to achieve.

²⁴ Research involving combustion of ethanol in engines or in shock-tubes, to investigate combustion of ethanol in engines, as cited by this commenter, does not provide insight into combustion of ethanol in a flare. This is because combustion occurs continuously in a flare, rather than intermittently as in an internal combustion engine. Combustion in a flare also occurs in the open atmosphere at ambient pressure, rather than in a confined space at elevated pressure.

²⁵ The statement regarding the control efficiency of flares in the article by J. Martin and others is worthy of mention. "The general industry practice accepts a 98% combustion efficiency for the conversion of carbon to CO₂ for refinery flares although more recent studies have measured higher efficiencies in most situations. So three different values of combustion efficiencies are analysed: 98, 99 and 99.5%."

be made for both the expansion and the original plant construction pursuant to Section 112(g) of the Clean Air Act.²⁶

This comment is based on flawed assumptions and analyses for the acetaldehyde emissions from the loadout operations, as discussed in the responses to earlier comments. As such, this comment does not show that either the proposed expansion or the existing plant is a major source for HAP emissions. Moreover, even if the expansion were a major source of HAP emissions, this would not trigger a requirement for case-by-case determinations of MACT for the expansion. As provided by 40 CFR 63 Subpart B, since the expansion will be a modification of an existing plant, such determinations would only be required for new process or production units that are part of the expansion that are major sources of HAPs when considered by themselves. It is unquestioned that each of the individual process or production units in the expansion is not a major source of HAPs when considered by itself. Then, as related to both the existing plant and the expansion, as various operations and units at the plant are subject to National Emission Standards for Hazardous Air Pollutants (NESHAP), any case-by-case MACT determination would not extend to the plant, only to units that are not subject to the NESHAP rules that have been adopted by USEPA.²⁷

14. The emissions limits for HAPs in the draft permit would be unrealistic blanket restrictions on actual emissions that are not enforceable as a practical matter. The largest listed sources of acetaldehyde are the fermentation scrubber, the oxidizers on the feed dryer, the feed cooler and component leaks. The application indicates that the total emissions from the existing and proposed expansion of the plant will be 19.501 tpy of acetaldehyde. Emissions of acetaldehyde from these units cannot be reliably monitored to assure that emissions from the proposed project do not reach 10 tpy of acetaldehyde. USEPA's position on unenforceable mass limits is clear.

This comment does not demonstrate that the limits for HAPs in the permit would be unrealistic, blanket limits or unenforceable. The limits are not unrealistic, as discussed in response to previous comments. Rather the limits account for HAP emissions from the different operations that would be part of the expansion, based on calculations that conservatively address the maximum emissions from different operations, with approaches that generally act to overstate emissions. In this regard,

²⁶ As this error is already contained in existing construction permits for the plant, USEPA's "once-in-always-in policy" for MACT applies to both the original plant construction and the proposed expansion of the plant. This is because a case-by-case MACT determination was not made for the original plant. See Memorandum from Jon Seitz (EPA) "Potential to Emit for MACT Standards - Guidance on Timing Issues" (May 16, 1995) at page 9 for a discussion of the "once in, always in" policy:

EPA believes that this once in, always in policy follows most naturally from the language and structure of the statute. In many cases, application of MACT will reduce a major emitter's emissions to levels substantially below the major thresholds.

Without a once in, always in policy, these facilities could "backslide" from MACT control levels by obtaining potential-to-emit limits, escaping applicability of the MACT standard, and increasing emissions to the major-source threshold (10/25 tons per year). Thus, the maximum achievable emissions reductions that Congress mandated for major sources would not be achieved. A once in, always in policy ensures that MACT emissions reductions are permanent, and that the health and environmental protection provided by MACT standards is not undermined.

²⁷ **The principal emission units at the original plant that are not subject to NESHAP standards, for which a case-by-case MACT determination would be required if this plant were determined to be a major source of HAP emissions, would be the feed dryers. The generation of HAP emissions from the feed dryers is minimized as they are steam tube dryers, rather than direct-fired dryers. The HAP emissions that are generated are controlled with oxidizers.**

the emissions limits for the expansion project account for emissions that are higher than the emission rates actually measured from emission units at the existing plant, as appropriate to provide a margin of compliance and account for normal variation in the operation of control measures. The limits for HAP emissions in the permit are not blanket limits since limits are set for various groups of related operations, as well as for the expansion as a whole. They are also not blanket limits as they are accompanied by operational requirements that address proper operation of the control equipment that is being used for HAP emissions. In particular, the flares at the plant must be operated to meet requirements of 40 CFR 60.18. The emission limits are also accompanied by relevant requirements for proper operation and for testing, monitoring, recordkeeping and reporting related to operation of control measures and actual emissions. As such, compliance with the limits for HAP emissions in the permit can be reasonably verified and the limits are enforceable.

15. The limits for acetaldehyde emission in the draft permit, as they are “blanket emission limits,” would be inconsistent with applicable USEPA guidance, *Guidance on Limiting Potential to Emit in New Source Permitting*,²⁸ which adopts the court’s holding²⁹ in *United States v. Louisiana-Pacific Corporation*, 682 F. Supp. 1122, 1133 (D. Colo. 1987) and 682 F. Supp. 1141 (D. Colo. 1988).

The Louisiana-Pacific court was guided in its reasoning by the D.C. Circuit's holding in *Alabama Power v. Costle*, 636 F. 2d 323 (D.C. Circuit 1979). Before *Alabama Power*, EPA regulations required potential to emit to be calculated according to a source's maximum uncontrolled emissions. In *Alabama Power*, the D. C. Circuit remanded those regulations to EPA with instructions that the Agency include the effect of in-place control equipment in defining potential to emit. EPA went beyond the minimum dictates of the D.C. Circuit in promulgating revised regulations in 1980 to include, in addition to control equipment, any federally enforceable physical or operational limitation. The Louisiana-Pacific court found that blanket limits on emissions did not fit within the concept of proper restrictions on potential to emit as set forth by *Alabama Power*.³⁰

²⁸ Memorandum, Subject: *Guidance on Limiting Potential to Emit in New Source Permitting*. From: Terrell E. Hunt, Associate Enforcement Counsel, Office of Enforcement and Compliance Monitoring, and John S. Seitz, Director, Stationary Source Compliance Division, Office of Air Quality Planning and Standards, June 13, 1989.

²⁹ This USEPA Guidance at page 3 reflects the holding from *United States v. Louisiana-Pacific Corporation*, 682 F. Supp. 1122, 1133 (D. Colo. 1987) and 682 F. Supp. 1141 (D. Colo. 1988):

[N]ot all federally enforceable restrictions are properly considered in the calculation of a source's potential to emit. While restrictions on hours of operation and on the amount of materials combusted or produced are properly included, blanket restrictions on actual emissions are not.

In addition, Judge Arraj in *Louisiana-Pacific*, 682 F. Supp. 1133, held:

[A] fundamental distinction can be drawn between the federally enforceable limitations which are expressly included in the definition of potential to emit and (emission) limitations.... Restrictions on hours of operation or on the amount of material which may be combusted or produced ... are, relatively speaking, much easier to “federally enforce.” Compliance with such conditions could be easily verified through the testimony of officers, all manner of internal correspondence and accounting, purchasing and production records. In contrast, compliance with blanket restrictions on actual emissions would be virtually impossible to verify or enforce.

³⁰ USEPA Guidance, *Guidance on Limiting Potential to Emit in New Source Permitting*, pages 4 and 5.

Blanket emission limits, such as the limits for acetaldehyde in the draft permit, which do not restrict operations or production by limiting hours of operation, fuel consumption, or final product, are not enforceable as a practical matter.

The limits for HAP emissions in the permit are also not “blanket limits” in the sense discussed by this comment. The limits for HAP emissions in the permit are accompanied by production limits. For example, Condition 1.1(b) of the permit limits the amount of ethanol produced by the plant. This limit directly addresses the amount of material handled by the loadout operations and other operations at the plant that involve the production or handling of ethanol.

16. The draft permit would improperly set limits for acetaldehyde emission that makes it appear that the proposed project is not major because the potential emissions of acetaldehyde are just below 10 tpy. This emission limit, however, is merely a paper limit that is not enforceable as a practical matter. Methods of verification, even if continually in place (which they are not), would only demonstrate accuracy within about 20 percent for typical USEPA reference methods. The permitted limit for acetaldehyde written to thousandths of a ton is not practically enforceable or technically supportable. Rather, the emission limit should be set at 10 tpy of acetaldehyde for both the old and new plants.

The issued permit sets limits for emissions of acetaldehyde that are appropriate and will serve to ensure that that the expansion will not be a major project for HAP emissions.³¹ As already discussed, the limits for emissions of acetaldehyde are enforceable as a practical matter and not “paper limits.” The fact that applicable USEPA emission test methods do not have “perfect” accuracy does not result in the emission limits set by the permit being unenforceable. Rather it is another reason why conservatism is present in the calculations that underlie the emission limits established for various emission units at plant. This because the inaccuracy or lack of precision of test methods means that emission tests may understate or overstate the actual emission rates. Calculations and emission limits for units must be developed to address the possibility that a particular emission test that is conducted for a unit overstates the actual emissions of the unit.³²

Likewise, the fact that emission limits for acetaldehyde for certain emission units (and accordingly the limits for the overall emissions of the expansion and the existing plant) are expressed in thousandths of a ton does not mean that the limits are not enforceable. Those particular limits are a consequence of the emission units that are being addressed by such limits. For example, the acetaldehyde emissions

³¹ While the expansion could be a major source for HAP emissions and still not be subject to a case-by-case determination of MACT, as already discussed, the issued construction permit does not alter the approach taken to the HAP emissions of the expansion project. Overall, HAP emissions from the expansion continue to be limited to below the levels at which a new source would be considered a major source of HAP emissions, e.g., acetaldehyde from the new facilities that are part of the expansion are limited to 9.8 tpy. This maintains a meaningful margin (2 percent) from the 10.0 tpy threshold at which a source is considered a major source based on emissions of an individual HAP.

³² For example, for purposes of discussion, presume that the accuracy of an applicable USEPA test method is ± 20 percent as suggested by this comment. To assure that testing of an emission unit will show compliance, emission calculations must reflect and the resulting emission limits must, at a minimum, be set at levels that are 20 percent higher than the actual levels of emissions that are expected. This is necessary to account for the possibility that testing will overstate actual emissions by 20 percent.

from the new ethanol and denaturant tanks that are part of the expansion project are limited to 0.002 tons/year. This limit is a direct consequence of the fact that these tanks store ethanol and denaturant. The limits for emissions of acetaldehyde from other units at the plant, including the fermentation operations, feed dryers and feed cooler cited by in this comment, for which compliance may be verified by emission testing, are set on an hourly basis with limits set to the hundredth of a pound.³³ Compliance with these limits will be able to be verified by emission testing and operational monitoring to confirm appropriate operation of control equipment in a manner consistent with operation during such emission testing.

17. Contrary to statements made by proponents for the proposed project at the public hearing, the relative efficacy of ethanol plants has been repeatedly questioned in light of the net energy loss from ethanol production,³⁴ potential threats to human health and welfare posed by emissions of ethanol plants,³⁵ and the impacts of ethanol production on rising food prices,³⁶ all of which raise concerns regarding the propriety of expanding the use of corn for fuel rather than for food.

The concern posed by this comment, i.e., whether it is sound public policy to encourage and support the use of corn to produce ethanol, as well as for food and animal feed, is not relevant to the decision that must be made by the Illinois EPA on the application for the proposed expansion of the Marquis plant. Under Illinois' Environmental Protection Act, the standard for issuance of the requested permit is whether the application shows compliance with applicable laws and regulations governing emissions. This standard is met so that the Illinois EPA must issue a construction permit for the proposed expansion.

³³ The setting of limits to the hundredth of a pound serves to address practices for rounding of emission test results, providing greater precision to the limits than would be present with limits that would only be set to tenths of pounds.

³⁴ See, e.g., Ethanol Fuel from Corn Faulted as "Unsustainable Subsidized Food Burning"

"David Pimental, a leading Cornell University agricultural expert, has calculated that powering the average U.S. automobile for one year on ethanol (blended with gasoline) derived from corn would require 11 acres of farmland, the same space needed to grow a year's supply of food for seven people. Adding up the energy costs of corn production and its conversion into ethanol, 131,000 Btus are needed to make one gallon of ethanol. One gallon of ethanol has an energy value of only 77,000 Btus. Thus, 70 percent more energy is required to produce ethanol than the energy that actually is in it. Every time you make one gallon of ethanol, there is a net energy loss of 54,000 Btus."

³⁵ See, e.g., L. Podhorsky, "Summary Literature Review of Potential Human Health Impact of Ethanol Production Facilities in Populous Areas" (September 28, 2007) at page 1:

"As a result of recent biofuel mandates and incentives in the Federal Energy Act of 2005, as well as proposals in the Senate Energy Bill 2007, ethanol plants are being built in, and proposed for, new areas of the country. These new locations are driven by a series of siting factors including access to railways, highways, natural gas lines, corn, and low-cost, plentiful water supplies. Many small Midwest towns and cities offer these very characteristics desirable to the ethanol industry. However, the commonly accepted pollution control devices and planning utilized in the Iowa corn fields do not provide the same level of protection to human health in densely populated areas of the Midwest. Ethanol plants are the source of carcinogenic Hazardous Air Pollutants (HAPS) emissions, as well as increasingly threatening bioaerosols."

³⁶ See Congressional Budget Office, "The Impact of Ethanol Use on Food Prices and Greenhouse-Gas Emissions" (April 2009) (Summary):

"Currently, most ethanol in the United States is produced from domestically grown corn, and the rapid rise in the fuel's production and usage means that roughly one-quarter of all corn grown in the United States is now used to produce ethanol. Since 2006, food prices have also risen more quickly than in earlier years, affecting federal spending for nutrition programs (such as school lunches) and the household budgets of individual consumers. The increased use of ethanol accounted for about 10 percent to 15 percent of the rise in food prices between April 2007 and April 2008, the Congressional Budget Office (CBO) estimates. In turn, that increase will boost federal spending for the Supplemental Nutrition Assistance Program (SNAP, formerly the Food Stamp program) and child nutrition programs by an estimated \$600 million to \$900 million in fiscal year 2009."

Moreover, the comment does not demonstrate that national and state policies that support production of fuel ethanol from corn are inherently unsound. It merely observes that certain individuals and organizations disagree with such policies or have expressed particular concerns about possible effects of current policies. Others support these policies, citing flaws in the analysis or assessments of those who oppose these policies. In particular, it is now commonly considered that fuel ethanol has a positive net energy balance when modern farming methods and ethanol manufacturing technology, the presence of benefits from the feed byproduct that accompanies ethanol production, and the full energy impacts from production of vehicle fuels from crude oil are appropriately considered.

18. I request a 45 day extension to the comment period to allow me to review relevant documents in the public record relating to the draft permit and prepare additional comments regarding the legal and technical sufficiency of the draft permit. At the public hearing on May 17, 2011 on the proposed project, I raised issues relating to emission factors and other technical and regulatory determinations incorporated into the draft permit. However, responses provided by Marquis' consultant and the Illinois EPA during this hearing and in a subsequent e-mail from the Illinois EPA's Analyst for the project on May 25, 2011, ultimately, raised more questions than were answered. Accordingly, I filed a Freedom of Information Act (FOIA) request with Illinois EPA on May 25, 2011, which was still pending as of the scheduled close of the comment period.³⁷ I assert that the draft permit would present numerous controversial issues relating to impacts on ambient air quality and public health and welfare.

The Illinois EPA has not extended the comment period in response to this request. The public, including this commenter, has had over 100 days to submit comments concerning the proposed issuance of a construction permit for the proposed expansion. The issuance of the requested permit should not be delayed to accommodate this commenter, who has had ample time to review the application for the expansion and submit substantive comments regarding the draft permit.³⁸

19. Because, as already discussed, the efficacy of fuel ethanol has been repeatedly questioned in light of the net energy loss, potential threats to human health and welfare posed by emissions of ethanol plants, and the impacts of fuel ethanol production on food prices, all of which raise concerns regarding the propriety of expanding the use of corn for fuel, any hardships that would result from delays to the proposed project by extending the public comment period would be outweighed by the public interest of ensuring that the proposed project is properly permitted and does not threaten air quality. Therefore, the Illinois EPA should extend the comment period to allow me, and others, to review relevant material obtained via FOIA and submit supplemental comments regarding the legal and technical sufficiency of the draft permit.

³⁷ In my FOIA request, I asked for copies of following records relating to the draft construction permit: 1) All calculation sheets and regulatory applicability notes; 2) All permit engineer and other internal review documents and correspondence with the Permittee and its representatives related to the application; and 3) All stack test results for the existing Marquis Energy plant.

³⁸ **This commenter waited until a week before the comment period was scheduled to close to make his request for information under the FOIA.**

This comment did not justify an extension of the comment period for the proposed expansion, with a resulting delay in the issuance of a construction permit for this project. As this comment pointed to matters that are outside the scope of the Illinois EPA’s decision on the application for this project, such as the “relative efficacy of fuel ethanol plants,” those matter were not relevant. The Illinois EPA has considered the comments that were submitted by this individual and responded to them. In particular, as already discussed, the proposed project is not expected to be a threat to ambient air quality. As the comment suggested that further review might identify some as yet unidentified deficiency in the permit, the commenter has had ample time to submit comments on the permit for the proposed project.³⁹

20. Based on the currently available information, the draft permit would be legally and technically insufficient, as discussed in my comments. Therefore, I request that that the Illinois EPA withdraw the draft permit and address the deficiencies identified in my comments.

As explained in response to individual comments, the permit that has been issued for the proposed expansion is both technically and legally sufficient. The comments that have been submitted do not provide grounds for the Illinois EPA to “withdraw the draft permit.”

FOR ADDITIONAL INFORMATION

Questions about the public comment period and permit decision should be directed to:

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³⁹ It should also be noted that this commenter may submit comments on the air pollution control permits for the Marquis plant in the future. Since the plant is a major source for purposes of Title V of the federal Clean Air Act, there will be an opportunity for the public to submit comments on the draft of the initial operating permit for the plant under Illinois’ Clean Air Act Permit Program (CAAPP), as well as on the periodic renewals of the CAAPP permit for the plant. In the CAAPP permits for the plant, the Illinois EPA must provide “periodic monitoring,” i.e., requirements for testing, emission and operational monitoring and recordkeeping, to assure compliance with the substantive terms and conditions that apply to the plant. Accordingly, the requirements for testing and monitoring to verify compliance with emission limits may be enhanced in the future as additional techniques become available for such purpose or deficiencies are identified in current verification techniques.