

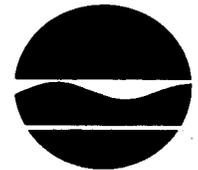
New York State Department of Environmental Conservation

Division of Environmental Permits, Region 9

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Joe Martens
Commissioner

March 7, 2014

Dear Sir or Madam:

**Responsiveness Summary
6 NYCRR 360 Solid Waste Management Facility Permit
Quasar Energy Group/Sustainable BioPower, LLC
Trav-Co Farms Storage Tank
Town of Marilla, Erie County
DEC No. 9-1454-00080/00001**

Thank you for expressing your interest in the above-referenced Part 360 Solid Waste Management Facility Permit application for the proposed storage tank at Trav-Co Farms in the Town of Marilla. After careful consideration of the application and your comments, the New York State Department of Environmental Conservation (the Department, NYSDEC or DEC) has made a determination to issue a Solid Waste Management Permit for the storage tank in accordance with applicable provisions of the Environmental Conservation Law (ECL), other applicable policy and regulation, and consideration of the effects that the proposed action will have on the natural resources of the State and the general welfare of the public. The issued permit can be viewed on the Department's website at <http://www.dec.ny.gov/chemical/94368.html>. This letter summarizes and responds to the comments received from the public as a result of the publication of the Notice of Complete Application for the project.

Many questions and concerns have been raised regarding the anaerobic digestion process as well as the proposed use of the Trav-Co Farms storage tank on Eastwood Road in the Town of Marilla in Erie County. The attached fact sheet (also found at <http://www.dec.ny.gov/chemical/94368.html>) was recently prepared by the Department to provide additional information on the anaerobic digestion process and the various approved and proposed Quasar projects in NYSDEC Region 9. Currently, two subsidiary companies of Quasar Energy Group have received permits to construct and operate anaerobic digestion facilities. The Niagara BioEnergy Anaerobic Digestion Facility is located in the Town of Wheatfield and the Buffalo BioEnergy Anaerobic Digestion Facility is located in the Town of West Seneca. The anaerobic digestion facilities are designed to convert certain approved waste products into biogas, which is then converted into electricity. In addition to biogas, the digesters also produce a digested liquid material (digestate) which can be used as a source of nutrients on farm fields. The Trav-Co Farm storage tank is proposed to store the digestate during the times of year when it cannot be directly land applied due to frozen ground or other reasons. No land application of the digestate is proposed as part of this storage tank permit application.

Some concerns were raised by residents that biosolids are being directly accepted at the Trav-Co storage tank, however, this is not the case. Biosolids may only be accepted at the digesters. The term biosolids refers to the solids from a wastewater treatment plant that have met State and Federal pollutant and pathogen requirements for land application. According to the Environmental Protection Agency, agricultural use of biosolids that meet strict quality criteria and application rates, have been shown to produce significant improvements in crop growth and yield. In the case of the Quasar projects, the biosolids, which already meet State and Federal pollutant and pathogen requirements for land application, will receive further treatment through the anaerobic digestion process at one of the Quasar digesters. Once the digestion process is complete, digestate remains. This digestate is what is proposed for storage

at the Trav-Co storage tank. When land applied, the digestate has agronomic (nutrient) value and can be used to fertilize fields for raising crops.

RESPONSES TO PUBLIC COMMENTS

Concern: Request for adjudicatory hearing

Response: The Department has made a determination not to hold a legislative or adjudicatory hearing for this proposed project. The criteria for holding a public hearing are outlined in 6 NYCRR 621.8. After a thorough review of the permit application and the public comments received, it was determined that no new significant or substantive issues that would require a hearing were raised. The comments received have been adequately addressed by the permit application and the responses provided here.

Concern: Summary of the State Environmental Quality Review (SEQR) Process for the proposed project

Response: The initial application for this project was received on October 31, 2012. A letter dated December 11, 2012 was sent to the Town of Marilla by the Department seeking to identify any jurisdiction or concerns the Town might have regarding the proposed project and to coordinate the SEQR process with the Town. With the letter, the Department also provided the Town a copy of the permit application and Part 1 of the full environmental assessment form for the proposed project. The Town of Marilla responded with a letter on December 21, 2012 indicating that they had no objection to the Department of Environmental Conservation seeking Lead Agency status for the proposed Trav-Co storage tank project and that there was no existing permit or approval in the Town of Marilla for the project. Subsequently, the Department determined that the project would not have a significant adverse environmental impact and issued a negative declaration for the proposed project. The SEQR documents are public documents and can be reviewed by submitting a request to the Department under the Freedom of Information Law.

Concern: Relationship of state approvals and local approvals for a project, consistency of project with local zoning

Response: Department permits contain language indicating that the permittee is responsible for obtaining all other permits, approvals, lands, easements and rights-of-way that may be required to carry out an activity authorized by a NYSDEC permit. State approvals do not supersede any local approvals required for this project. It is up to the local municipality to determine if the project is consistent with local zoning codes, and if not, whether zoning variances or changes will be granted to allow the project to proceed.

Concern: Use of Alden Advertiser for publication of legal notice

Response: The Alden Advertiser was used for publication of the Notice of Complete Application because it is the official newspaper identified by the Town of Marilla for the publication of legal notices. It is standard procedure for the Department to use the official newspaper identified by a municipality for publication of notices.

Concern: Impact on property values

Response: Impacts to property value are principally a local issue which can be addressed through zoning requirements or other measures by the local government. The digested material proposed to be stored in the tank is ultimately intended for use on approved agricultural fields and the Town of Marilla is an agricultural community.

Concern: Definition of Non-Specific Solid Waste Management Facility

Response: Within the Department's 6 NYCRR Part 360 Solid Waste Management Facilities Regulations, there are subparts for various types of solid waste management facilities such as land application and composting facilities, but there is not a subpart with details for digesters. The Regulations list permit application requirements for nonspecific facilities in 360-1.9(b). Therefore, the term "non-specific" refers to the fact that the facility under review does not fall under a specific sub-part of the Part 360 regulations, not to the type of waste the facility receives. The Quasar digesters were permitted as nonspecific facilities, but still need to adhere to the general permit requirements and operational requirements for all solid waste management facilities.

Concern: Activities proposed to be authorized under the Trav-Co Storage Tank permit

Response: As stated above, the Trav-Co Farm storage tank is proposed to store the digestate generated at the Quasar anaerobic digestion facilities during the times of year when it cannot be directly land applied due to frozen ground or other reasons. No land application of the digestate is proposed as part of this permit application. The land application of the digested material is covered under a separate permit and any field on which the company wants to land apply the digestate must be approved by NYSDEC prior to land application of the material. Although a Comprehensive Nutrient Management Plan (CNMP) is not required under the Part 360 Solid Waste Management regulations, the digestate must be applied at agronomic rates. Any farm receiving digestate for land application would be expected to meet all other requirements applicable to their operation. Questions pertaining to what is permitted by Town code in a particular municipality must be directed to the municipality.

Concern: Structural integrity of the tank

Response: The ability of the storage facility to contain the waste and operate in accordance with the State regulations is part of the engineering report submitted with the permit application, which is certified by a professional engineer. In addition, during the operation of the facility, in accordance with 360-4.10(f), the storage facility must be completely emptied, cleaned, and inspected at least once every 12 months. The NYSDEC must be notified at least one week before the cleaning operation is complete. Any damage or deterioration revealed by the inspection must be repaired and a certification report must be submitted to the Department before the facility again receives waste.

Concern: Proximity of facility to homes with drinking water wells, potential ground water impacts

Response: The facility is in the vicinity of homes which obtain their drinking water from wells. However, the tank proposed to be used for the storage of the digestate is a concrete tank with walls approximately 12 inches thick. As discussed above, the tank was inspected by an engineer licensed to practice in New York State who certified that the tank was constructed according to the design plans. Also, Department regulations require that all storage facilities be completely drained, cleaned and inspected at least once every 12 months. Any damage or deterioration revealed by the inspection must be repaired before the facility again receives digestate for storage. Additionally, Quasar has offered to have a third party laboratory collect and analyze samples from wells servicing homes that are contiguous to the Travis property and are within ¼ mile of the facility to establish a baseline prior to use of the facility. Further, the digested material that is proposed to be stored in this tank is not hazardous and has already been approved for land application but will be stored when it cannot be directly land applied from the digester due to the time of year or soil conditions (ex. crops already planted on the fields or the ground is frozen). The land application of the digested material is covered under a separate permit and any field on which the company wants to land apply the digestate must be approved by NYSDEC prior to land application of the material.

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Concern: Proximity to surface waters, potential surface water impacts

Response: There is a stream on the property; however it is located approximately 125 feet north of the storage tank. This exceeds the required separation distance between surface waters and storage facilities for the digestate prior to land application. New York State regulations also require that two feet of freeboard be maintained in the tank to prevent overflow during heavy rain or snow events. In addition, the applicant has provided a Contingency Plan for Spill Prevention and Response to be followed in the event of a spill. This plan is also included in the Operational Requirements Plan for the facility. Again, the digested material that is proposed to be stored in this tank is not hazardous and has already been approved for land application but cannot be directly land applied from the digester due to the time of year or soil conditions (ex. crops already planted on the fields or the ground is frozen). The land application of the digested material is covered under a separate permit and any field on which the company wants to land apply the digestate must be approved by NYSDEC prior to land application of the material.

Concern: Odor, crust layer which forms on top of the storage tank

Response: The digestate stored at the storage tank should exceed the NYSDEC and USEPA requirement for a minimum of 38 % volatile solids reduction. Volatile solids are the portion of the material that can cause odor. A crust will form over the digestate that will be similar to a hard cow manure pie in a pasture. The storage facility is isolated and any odors should be localized around the tank when the tank is stirred prior to load out. Loading will occur through an existing system that loads from the bottom portion of the tank under the naturally occurring crust, which should reduce odor potential. Over several years experience, Quasar has not observed any movement or dust generation from the crust in any of their other lagoons at their Ohio facilities. Should persistent odor or dust complaints be received, the Department will require additional controls as deemed necessary.

Concern: Increased traffic volume and impacts to local roads

Response: The applicant anticipates filling the storage tank twice annually with a maximum of 250 hauling days per year. Based on the volume of the tank and a maximum load of 8,000 gallons per truck, it will take at least 125 trucks to fill the tank. If the maximum truckload is used routinely, it will take approximately one month to fill the tank each time. However, since the actual capacity of the tanker trucks will vary, there will be between 4-6 trucks per day entering and leaving the facility over the course of two different periods during the year. The trucks will utilize town and county roads and will be required to follow all posted load and speed limits. The tank will be emptied during times when the weather is acceptable for land application and the fields do not have crops planted. The additional traffic will be during the hours between 7 am to 5 pm. An additional 4 to 6 trucks per day over a limited time during the year will not have a significant effect on current traffic levels in the area.

Concern: Human health and wildlife impacts, impacts on hunting and fishing

Response: New York State has been regulating the practices of storage and land application of biosolids for more than 30 years and has long established standards for pathogen treatment, pollutants limits, and site controls to address the potential human health and environmental concerns associated with these practices. The digested material will be sampled prior to storage and will meet all regulatory standards. Although the material to be stored has been approved for land application, the Trav-Co storage tank project does not involve land application of the digested material. Access to the site will be controlled and standard operating procedures will be in place to protect human health and wildlife.

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Concern: Heavy metals

Response: All wastewater treatment plant sludges (biosolids) are analyzed for the following metals: Arsenic, Cadmium, Chromium (total), Copper, Lead, Mercury, Molybdenum, Nickel, Selenium, Zinc prior to acceptance at the digester facility. Following digestion at the digester facility, the digestate will undergo a second round of testing for the same metals prior to placement in the storage tank. The Part 360 regulations set forth testing frequency and concentration standards for these metals and the digestate must meet the concentration standards prior to land application or tank storage.

Concern: Stormwater controls, potential for tank overflow

Response: The tank will be managed, inspected, and maintained regularly. The details of tank management, including spill management, are in written standard operating procedures (SOPs) that have been provided to the Town and NYSDEC. In addition, in order to minimize the risk of tank overflow, a minimum of two feet of freeboard must be maintained in the storage tank. A line will be painted inside the tank so this two foot measurement can be easily identified. Sustainable BioPower, a subsidiary of Quasar Energy Group, will be proactive with inspection and maintenance, which will greatly reduce the potential for spills, and will take corrective actions if issues arise.

Nitrogen and phosphorus are the primary water contaminants from biosolids. Both nutrients are necessary for plant growth and can be controlled in an environmentally sound manner. Surface waters can be protected by using conservation practices that reduce erosion and prevent the movement of sediments and accompanying nutrients from the site of application to ponds, lakes, or streams.

The NYSDEC restricts biosolids application to sites where surface runoff is minimized and restricted from reaching surface water bodies, drainage ditches, and other impoundments. Further, application within 200 feet of wells is prohibited to reduce the potential for waste constituents to move from the soil into groundwater. As noted previously, land application would require a separate permit.

Concern: Feedstocks accepted at digester

Response: None of the feedstocks approved for acceptance at the anaerobic digestion facility will be directly accepted at the storage tank. However, the anaerobic digestion facility is permitted to accept the following sources for processing:

- Foodwastes –in liquid, semi-solid, and solid forms. These will be generated at local food processing facilities.
- Energy crops (i.e. corn silage)
- FOG (fat, oil, grease) – This is only animal or vegetable based fat, oil, and grease. These are generated by local food processing facilities and restaurants.
- Manure- Animal manures are unlikely to be accepted, but are permitted.
- Septage – from private homes is not likely, but can be accepted at this facility
- Sewage sludge (biosolids) – Biosolids are nutrient-rich organic materials resulting from the treatment of domestic sewage at a wastewater treatment plant. When treated and processed, these residuals can be recycled and applied as fertilizer to improve and maintain productive soils and stimulate plant growth. Again, biosolids are only accepted at the digester, not directly accepted at the storage tank.

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Feedstocks which have not been permitted for acceptance at the anaerobic digestion facility:

- Slaughterhouse waste has not been suggested or requested as a feedstock. Should Sustainable BioPower request slaughterhouse waste as a feedstock, it would need to be approved for addition to the digester. As with all other feedstocks, it would not be directly accepted to the storage tank.

Concern: Sampling requirements

Response: Each biosolids source and the digestate resulting from the digestion of biosolids must be analyzed for the frequency and parameters outlined in 6 NYCRR Part 360 Solid Waste Management Facilities Regulations, Subpart 4.7(c)(1), including:

- Total Kjeldahl Nitrogen, Ammonia, Nitrate, Total Phosphorous, Total Potassium, pH, total Solids, Total Volatile Solids, Arsenic, Cadmium, Chromium (total), Copper, Lead, Mercury, Molybdenum, Nickel, Selenium, and Zinc.

All biosolids must be treated by a method to reduce pathogens in accordance with DEC Part 360 Regulations.

Annually, the soil in the fields where digestate will be land applied must be analyzed for the following parameters: pH, arsenic, cadmium, chromium (total), copper, lead, mercury, molybdenum, nickel, selenium, and zinc. A minimum of one analysis is required for every 50 acres, or fraction thereof. Each soil sample must be a composite of a minimum of ten randomly selected sample locations.

Concern: Rate of application, how often is land spreading repeated on a particular field

Response: Land application of the digestate is covered under a separate permit and no land application is proposed as part of the Trav-Co Storage Tank permit application. In cases where land application is approved under a permit, nutrient management planning ensures that the appropriate quantity and quality of digestate are land- applied to the farmland. The digestate application is specifically calculated to match the nutrient uptake requirements of the particular crop. The application rate must not exceed the agronomic rate for the crop grown; calculations showing the nutrient loading, including nitrogen, phosphorus and potassium are required annually; and the metal loading must not exceed 20% of the cumulative loading limit in any one year.

Concern: Necessity of site restrictions

Response: There is no need for site restrictions here because the digestate will be contained in a storage tank with a minimum two feet of freeboard to prevent overflow. Regarding the application of biosolids, which is not being permitted at this site, the National Academy of Sciences has reviewed current practices, public health concerns and regulator standards, and has concluded that the use of biosolids "in the production of crops for human consumption when practiced in accordance with existing federal guidelines and regulations, presents negligible risk to the consumer, to crop production and to the environment."

In New York State, there are buffer requirements, public access, and crop harvesting restrictions for the land application of Class B biosolids (treated but still potentially containing detectable levels of pathogens). Digestion is usually operated as a Class B treatment process.

In areas where land application is permitted, each area must be staked prior to land application to define the application boundaries. Land application is prohibited in areas where groundwater is within 24 inches of the ground surface at the time of application. Land application is prohibited in areas where bedrock

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lies less than 24 inches below the ground surface. Further, application within 100 feet of surface water is prohibited to reduce the potential for waste constituents to move into the surface water.

The use of appropriate controls (application rates, buffers to surface waters, etc.) is common for all nutrients used on farms including manure and commercial fertilizer.

Concern: Risk of spillage

Response: Trucks are unloaded on a concrete pad, where the digestate flows into the collection system of the storage tank. An earthen berm will be constructed and maintained around the concrete pad for spill protection. In order to avoid spills, a minimum of two feet of freeboard must be maintained in the storage tank. A line will be painted inside the tank so this two foot measurement can be easily identified.

Concern: Track record of Quasar Energy Group

Response: Quasar Energy Group is managing 500,000 tons of biomass per year and is applying 100 million gallons of digestate (called Equate) on over 10,000 acres of farm land and in dozens of locations. The Department recognizes that there have been Notices of Violation (NOVs) issued by the Ohio EPA or their agent for Quasar facilities since the company was created in 2006. Quasar has provided the Department information on these NOVs and the actions taken to resolve them. The Trav-Co storage facility will be inspected periodically by the Department and any identified problems will be addressed.

Concern: Legal liability for operation of the Trav-Co storage tank facility

Response: Sustainable BioPower LLC, a subsidiary company of Quasar Energy Group, is the applicant and permittee for the Trav-Co storage tank project. Sustainable BioPower will be legally responsible for the operation of this facility under the terms and conditions of the issued permit. Sustainable BioPower LLC will also be responsible for the proper closure of this facility if it ceases to operate.

Concern: Impact of self-reporting on consistent and safe regulation

Response: Sustainable BioPower LLC will be required to file an annual report for the Trav-Co storage facility. The yearly inspections of the integrity of the storage structure can be witnessed by Department staff, but self-reporting is standard Department procedure for this type of permit. In addition, for areas permitted for land application, Sustainable BioPower LLC, must also prepare and submit an annual report containing the information required by the NYS DEC Regulations pertaining to land application of the digestate including fields used, quantity applied, calculations showing nutrient loading, analytical results, etc. All analytical data must be performed by an outside laboratory that is certified by the Department of Health.

If you have any questions regarding this letter, please feel free to contact Mr. Bruno Di Bella or me at 716/851-7165.

Sincerely,



Lisa M. Porter
Deputy Regional Permit Administrator

LMP:ldg

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ecc: Mr. Dennis Weiss, NYSDEC Division of Materials Management, Attn: Ms. Efrat Forgette
Ms. Sally Rowland, NYSDEC Division of Materials Management, Central Office
Mr. Bruce Bailey, Quasar Energy Group
Hon. Earl Gingerich, Supervisor, Town of Marilla