

**From:** [Kooker, Keith R. \(DNREC\)](mailto:Kooker.Keith.R.@DNREC)  
**To:** [AAIvino@bioenergydevco.com](mailto:AAIvino@bioenergydevco.com); [JBrusa@bartonandloguidice.com](mailto:JBrusa@bartonandloguidice.com); [CMckiernan@bioenergydevco.com](mailto:CMckiernan@bioenergydevco.com); [Norma Brasure](mailto:NormaBrasure@duffnet.com); [DSmall@verdantas.com](mailto:DSmall@verdantas.com)  
**Cc:** [Roushey, Jennifer S. \(DNREC\)](mailto:Roushey.Jennifer.S.@DNREC)  
**Subject:** Second Review of Seaford, DE Bioenergy Anaerobic Digestion Plans - WPCC 3007/22  
**Date:** Monday, May 2, 2022 5:31:00 PM

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Anna, Christine, Norma, John and Dave:

After reviewing your plan re-submittal based on my comments below, I have the following comments:

1. Why is sheet P100 labeled an Overall Site Utilities Plan when there are no utilities that I can see? It looks to me like the plan should be labeled an Overall Site Plan or Key Site Plan.
2. Provide a site plan sheet for every area where there is proposed construction, including the proposed site entrance and interior road. The boundaries of these sheets should coincide with adjacent sheet boundaries and be clearly labeled on a key plan. These Site Plan sheets should label all proposed utilities and construction.
3. On sheet P100, there is a Purdue parcel shown adjacent to the proposed construction. Is this area a part of the project, is it an existing area or is it a separate project not being built as part of this project? Label accordingly.
4. On sheets P210-P214, there are various notes about see utility details, see electrical drawings, see BTS drawings and see details. Provide all of those referenced sheets and indicate on the site plan sheets what sheets these details and other drawings are on.
5. On sheets P210-P214, there are various items that are shown very light and are hard to see. Why is this the case? Are these items existing, future or something else?
6. Sheet P213 shows a UF feeding tank, an anoxic reactor and an aerobic reactor. Are these items part of this Anaerobic digestion project or are they a part of the pretreatment project. Whatever is not part of the anaerobic project, should be labeled and shown as future. Typically if something is future, it is shown as a lighter shade where it is clearly distinguished that it is not a part of this project.
7. After addressing the aforementioned comments, please submit one hard copy of the revised plans to the address in the signature block.

Keith Kooker, P.E.  
DNREC Environmental Finance  
97 Commerce Way, Suite 106  
Dover, DE 19904  
302-739-9351  
302-739-2137 (Fax)

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**From:** Kooker, Keith R. (DNREC)  
**Sent:** Wednesday, March 23, 2022 4:48 PM  
**To:** [JBrusa@bartonandloguidice.com](mailto:JBrusa@bartonandloguidice.com); [CMckiernan@bioenergydevco.com](mailto:CMckiernan@bioenergydevco.com); [Norma Brasure](mailto:NormaBrasure@duffnet.com) <[nbrasure@duffnet.com](mailto:nbrasure@duffnet.com)>; [DSmall@verdantas.com](mailto:DSmall@verdantas.com)  
**Cc:** [Roushey, Jennifer S. \(DNREC\)](mailto:Roushey.Jennifer.S.@DNREC) <[Jennifer.Roushey@delaware.gov](mailto:Jennifer.Roushey@delaware.gov)>

**Subject:** Initial Review of Seaford, DE Bioenergy Anaerobic Digestion Plans - WPCC 3007/22

Christine, Norma, John and Dave:

After reviewing the plans submitted concerning the wastewater construction permit application for the subject project, I offer the following comments:

1. On sheet G001, label where the project site is. Is it in the dashed circle area?
2. Provide an Overall Site Plan which clearly shows the anaerobic digestion components/area as proposed and the wastewater treatment improvements components/area as future construction. This plan should show the property boundaries and proposed site entrance, connecting roads, driveways, etc.
3. Provide designated areas on the Site Utilities Plan (P110) or create a Key Map Plan which indicates what sheets (P210-P214) correspond to what areas.
4. Provide one Site Plan clearly labeling all of the major proposed anaerobic digestion components, like tanks, buildings, pump stations, major mechanical/electrical equipment, etc.
5. Upon completion, please provide one paper copy of the plans incorporating the aforementioned items. The plans can be mailed to my attention at the address in the signature block.

Feel free to email or call with any questions concerning my comments. We can set-up another virtual call if needed.

Keith Kooker, P.E.  
DNREC Environmental Finance  
97 Commerce Way, Suite 106  
Dover, DE 19904  
302-739-9351

**From:** [Churchill, Brian \(DNREC\)](#)  
**To:** [Schlachter, Adam \(DNREC\)](#); [Kooker, Keith R. \(DNREC\)](#); [Taylor, Zachary \(DNREC\)](#); [Dolt, Chad \(DNREC\)](#)  
**Cc:** [Roushey, Jennifer S. \(DNREC\)](#)  
**Subject:** BioEnergy - Tie in with Biosolid and Residuals Program  
**Date:** Thursday, July 21, 2022 2:40:54 PM

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Good afternoon,

I really appreciate the call this morning to coordinate things between our programs.

I looked through the biosolids and residuals regulations (<https://regulations.delaware.gov/AdminCode/title7/7000/7100/7103.shtml#TopOfPage>) and the 10 metals in the biosolids regulations are also in the draft Resource Recover Permit.

Class A/PFRP pathogen reduction requirements in the permit are 131F/55C for 15 days or longer with 5 turnings of the windrow. Vector attraction reduction is met by the aerated static pile method and maintain a temperature of 104/40C for at least 14 consecutive days with an average temperature over 113f/45C. Both of those regiments are the same as what is required in the biosolids regulations.

Below are some additional requirements in the biosolids regulations required in distribution and marketing permits for Class A/EQ biosolids. I wanted to see if a few of the items (highlighted in yellow) could be addressed in the permit and/or permit application.

### **120.0 Project Development Reports: Specific Requirements for Marketing and Distribution of Exceptional Quality Sludge or Sludge Products**

Sewage sludge or sludge products that contain sewage sludge which has been stabilized as per Subsection 603 by a Process to Further Reduce Pathogens, meets one of the Vector Attraction Reduction Requirements specified in Subsection 88.2.1 through 88.2.8 and contains lower metal concentrations than the allowable Pollutant Concentration specified Table 402.3 may be marketed and distributed in the State. Specific information required for the Project Development Report includes:

120.1 Identification of the site(s) where the Exceptional Quality sludge or sludge product is generated. A description of the source and quantity of sludge or sludge products generated.

120.2 A detailed description of the treatment process and facility equipment, which clearly explains how the end-product is treated to meet the Exceptional Quality criteria.

120.3 A description of the quality control and monitoring program(s) utilized at the facility.

120.4 A description of the record keeping and reporting system used at the facility producing the exceptional quality material.

120.5 A copy of the proposed label which includes the following information:

120.5.1 It shall identify the product as containing sludge and provide the name and address of the preparer.

120.5.2 Provide information on essential plant nutrient content and instructions for proper use on different plant types, soils and slopes, maximum loading rates (such as number of square feet per bag, ratio of sludge to soil in sludge-soil mixture, etc.).

120.5.3 For sludge or sludge products for general distribution to the public which contain more than 4 percent iron on a dry weight basis, it shall warn against using the sludge or sludge product on pasture land.

120.5.4 Describe proper procedures for storage and stockpiling of the material.

120.5.5 A statement indicating that the product should not be applied to any site that is flooded, frozen or snow covered, and identify any unacceptable uses of the material.

120.5.6 Shall include a statement that land application of sewage sludge is prohibited except in accordance with the instructions on the label or information sheet.

120.6 Information confirming that all requirements of the Delaware Department of Agriculture Regulations (Chapter 21, Title 3, Delaware Code) governing the sale of commercial fertilizers and soil conditioners have been met. Registration information is available on DDA's website - <https://agriculture.delaware.gov/agriculture-compliance/instructions-and-applications/>

### **141.3 Records and recordkeeping.**

141.3.1 Any person that distributes and markets sludge or sludge products shall keep a log of all persons that receive more than ten (10) cubic yards of material per year.

141.3.2 Before distributing sludge or sludge products to any person who will utilize more than 100 tons of the material in a twelve (12) month period, the permittee shall submit a plan to the Department which addresses the following:

141.3.2.1 The end use(s) of the material

141.3.2.2 Maximum application rates

141.3.2.3 Total amount of material to be utilized

141.3.2.4 Storage practices

141.3.2.5 Transportation methods

Please let me know if you have any questions.

Thank you,

Brian Churchill  
Environmental Scientist  
Surface Water Discharges Section  
Division of Water  
Voice: (302) 739-9353