

March 20, 2018

Mr. Christopher Salloway
Pennsylvania Department of Environmental Protection
14th Floor – Rachel Carson Building
400 Market Street
Harrisburg, PA 17101

**RE: General Permit Application
Slate Belt Heat Recovery Center, LLC
Plainfield Township, Northampton County, PA
EarthRes Project No. 151014.004**

Dear Mr. Salloway:

On behalf of Slate Belt Heat Recovery Center, LLC (SBHRC), EarthRes Group, Inc. hereby submits an original and five (5) copies of a general permit application to process biosolids and produce Class A biosolid products. The facility will be developed by SBHRC, LLC on a parcel on Grand Central Sanitary Landfill's (GCSL's) site, adjacent to the Green Knight Economic Development Corporation (GKEDC) landfill gas-to-energy plant (LFGTE). The SBHRC will beneficially use recovered waste heat from the GKEDC LFGTE facility to dry biosolids and produce Class A biosolid products.

A check made payable to Commonwealth of Pennsylvania in the amount of \$2,000.00, is included for the application fee.

Please contact me with any questions, or if you require additional information.

Sincerely,
EarthRes Group, Inc.



Thomas, G. Pullar, P.E.
Senior Project Manager

Enclosures: As Stated

cc: John Goodwin, SBHRC (w/ enclosure)
Glenn Kempa, GCSL (w/ enclosure)
Tom Petrucci, Plainfield Township (w/ enclosure)
Carlton Snyder, GKEDC (w/ enclosure)
Colleen Stutzman, PA DEP NERO (w/ enclosure)

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**SECTION 1.0
INTRODUCTION**

1.0 INTRODUCTION

Slate Belt Heat Recovery Center, LLC (SBHRC), hereby submits this application for a new General Permit involving the drying of municipal biosolids to create Class A biosolid products for beneficial reuse. SBHRC plans to operate the proposed Slate Belt Heat Recovery Center (SBHRC) located on Grand Central Sanitary Landfill's (GCSL's) property in Plainfield Township, Northampton County, PA. The application has been prepared and submitted to the Pennsylvania Department of Environmental Protection (PA DEP) pursuant to PA Code Title 25 Environmental Protection, Municipal Waste Regulations, Chapters 271 through 285.

GCSL owns and operates a sanitary landfill site in Plainfield Township, Northampton County, Pennsylvania. GCSL is permitted by PA DEP under Solid Waste Management Permit No. 100265 to receive municipal, commercial, residual, industrial, construction/demolition waste, and special handling wastes approved by the PA DEP.

The SBHRC Facility will be developed by SBHRC and located on a separate parcel leased from GCSL within the landfill permit boundary. The site is adjacent to the existing Green Knight Economic Development Corporation (GKEDC), a landfill gas-to-energy (LFGTE) plant (Figure 1, Attachment A) which beneficially uses landfill gas (LFG) from GCSL to generate "green" electricity. The proceeds from the power sales are used to support community grants, scholarships, and local economic development.

The proposed SBHRC Facility will dry biosolids to produce a Class A biosolid product that can be used as a fertilizer blending agent, soil conditioner, and/or a renewable fuel product. The proposed project location was chosen to use the waste heat recovery option designed into the GKEDC facility. The proposed project will also create landfill diversion by utilizing biosolids that would otherwise be landfilled for a beneficial use.

The SBHRC facility will consist of a main dryer building, office space, and supporting areas. Ancillary equipment and structures located around the main building include mechanical equipment, truck tipping equipment, an enclosed biosolids receiving unit, odor control equipment, and enclosed Class A product storage silos. Additional required processes located on the property include a supplemental thermal oil boiler and a process wastewater storage tank. The facility features are shown on Figure 2 – Site Plan.

Incoming vehicles transporting dewatered biosolids will access the facility using the existing GCSL entrance on S.R. 512. The vehicles will proceed to the GCSL scales, pass the radiation monitors and follow the GCSL radiation action plan as required, and weigh in. After weighing, the inbound vehicles will proceed down the landfill access road and enter the SBHRC Facility from the east. At the Site, the vehicle will check-in and, if in compliance with acceptance criteria, back onto the truck tipping equipment to unload into the covered receiving unit. After unloading, the vehicle will weigh out on the GCSL scales and may return to the receiving area to be filled and volume metered with process wastewater from the 300,000 gallon storage tank for transportation to offsite disposal. The vehicle will exit the facility to the west, and depart the site.

Biosolids are pumped from the receiving unit to the dryers via enclosed conveyance equipment. The drying process consists of two (2) enclosed belt dryers in parallel, each with a capacity of approximately 200 wet tons per day of biosolid, for total throughput of 400 wet tons per day at an average of 21% total solids. The dryers will primarily use waste heat recovered from the GKEDC LFGTE plant, as originally intended in the GKEDC design. The stacks of three (3) existing turbines located at the GKEDC plant will be used to accommodate a heat exchanger, to support a thermal oil system that will be used to convey waste heat from the stacks to the drying process. A supplemental thermal oil heater can also be used to supply heat to the process, and is fueled by natural gas or landfill gas (LFG) from GCSL.

The dryer belts and all associated processes will be enclosed and operated in a negative pressure manner to contain process air stream. The dryers will vent to a non-contact condenser to remove evaporated moisture. The odor control system will consist of a fan and scrubber for odor control and cleaning the exhaust gases. The only exhaust point from the dryers will be process air from the scrubber control device. There is no combustion equipment directly within the thermal dryers themselves.

The odor control process will be a two-step chemical scrubber system which incorporates two (2) scrubbing vessels with a system fan, recycle pump, instrumentation and controls, and a common odor control system stack (control device). The packed-bed scrubber increases the contact surface of gas and wash fluid to ensure an effective material transport from off-gas to wash fluid. Stage one is a packed column which may utilize an acid wash fluid (sulfuric acid). Stage two may use an alkaline wash fluid (sodium hydroxide). The wash fluid is collected and continuously circulated by a pump to a spray nozzle above the packing. Values of pH in each stage will be monitored and adjusted to meet exhaust requirements.

Process wastewater generated by the drying process includes non-contact condenser water, cleaning process and truck wash water, scrubber blowdown, and receiving pad stormwater. All process wastewater will be collected, stored in an onsite, above-grade storage tank, installed with secondary containment, and hauled to an approved offsite liquid disposal facility. Uncontaminated stormwater runoff will be discharged through a vegetated swale to Sediment Basin #2 under an individual NPDES permit. Sanitary wastewater originating from office, restrooms and employee facilities will be discharged to the local publically owned treatment works operated by the Pen Argyl Municipal Authority (PAMA).

The Class A dried product will be transferred, by enclosed conveyance equipment, to storage silos located outside of and adjacent to the dryer building. Transport vehicles will weigh in at the GCSL scale and enter the facility from the west. The storage silos are bottom feeding allowing a vehicle to drive under the silos to be loaded by a loading nozzle to control truck filling. The loaded vehicle will then weigh out at the GCSL scale after exiting the facility and then access S.R. 512 to transport the Class A biosolid product to the end user.

SECTION 2.0
APPLICATION FORMS

GENERAL INFORMATION FORM (GIF)



GENERAL INFORMATION FORM -- AUTHORIZATION APPLICATION FOR A RESIDUAL OR MUNICIPAL WASTE GENERAL PERMIT APPLICATION

Before completing this General Information Form (GIF), read the step-by-step instructions provided in this application package. This version of the General Information Form (GIF) must be completed and returned with any municipal or residual general permit application being submitted to the Department.

Related ID#s (If Known)	DEP USE ONLY
Client ID# <u>TBD</u> APS ID# _____	Date Received & General Notes
Site ID# <u>TBD</u> Auth ID# _____	
Facility ID# <u>TBD</u>	

CLIENT INFORMATION

DEP Client ID# TBD	Client Type / Code LLC		
Organization Name or Registered Fictitious Name Slate Belt Heat Recovery Center, LLC		Employer ID# (EIN) 45-4824177	Dun & Bradstreet ID#
Individual Last Name N/A	First Name	MI	Suffix SSN
Additional Individual Last Name	First Name	MI	Suffix SSN
Mailing Address Line 1 435 Williams Court		Mailing Address Line 2 Suite 100	
Address Last Line - City Baltimore	State MD	ZIP+4 21220-2888	Country USA
Client Contact Last Name Goodwin	First Name John	MI	Suffix
Client Contact Title Vice President - Engineering		Phone 443-489-9069	Ext
Email Address jgoodwin@SYNAGRO.com		FAX N/A	

SITE INFORMATION

DEP Site ID# TBD	Site Name Slate Belt Heat Recovery Center			
EPA ID#	Estimated Number of Employees to be Present at Site	16		
Description of Site Biosolids Processing Facility				
County Name Northampton	Municipality Plainfield	City <input type="checkbox"/>	Boro <input type="checkbox"/>	Twp <input checked="" type="checkbox"/>
County Name	Municipality	City <input type="checkbox"/>	Boro <input type="checkbox"/>	Twp <input type="checkbox"/>
State PA				
Site Location Line 1 2100 block of Pen Argyl Rd.		Site Location Line 2		
Site Location Last Line - City Pen Argyl	State PA	ZIP+4 18072		
Detailed Written Directions to Site Take Route 33 to the Route 512 Wind Gap/Pen Argyl exit. Off the exit, turn onto Route 512 North (a right turn from Route 33 Northbound). Follow Route 512 through Wind Gap, turning right at the Turkey Hill in Wind Gap (3rd traffic light) to stay on Route 512. After 1.4 miles, turn right into Grand Central Sanitary Landfill. The entrance to the Slate Belt Heat Recovery Center will be on the right adjacent to the Green Knight Energy Center at 2147 Pen Argyl Road, Pen Argyl, PA.				
Site Contact Last Name Goodwin	First Name John	MI	Suffix	
Site Contact Title Vice President - Engineering	Site Contact Firm Slate Belt Heat Recovery Center, LLC			
Mailing Address Line 1 435 Williams Court		Mailing Address Line 2		
Mailing Address Last Line - City Baltimore	State MD	ZIP+4 21220-2888		
Phone 443-489-9069	Ext	FAX N/A	Email Address jgoodwin@SYNAGRO.com	

NAICS Codes (Two- & Three-Digit Codes – List All That Apply)
562

6-Digit Code (Optional)
562219

Client to Site Relationship
OWNOP Owner/Operator

FACILITY INFORMATION

Modification of Existing Facility

- | | | |
|--|-------------------------------------|--------------------------|
| | Yes | No |
| 1. Will this project modify an existing facility, system, or activity? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Will this project involve an addition to an existing facility, system, or activity? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

If "Yes", check all relevant facility types and provide DEP facility identification numbers below.

Facility Type	DEP Fac ID#	Facility Type	DEP Fac ID#
<input checked="" type="checkbox"/> Air Emission Plant	GKEDC #574507	<input type="checkbox"/> Land Recycling Cleanup Location	
<input type="checkbox"/> Beneficial Use (water)		<input type="checkbox"/> MineDrainageTrmt/LandRecyProjLocation	
<input type="checkbox"/> Captive Hazardous Waste Operation		<input type="checkbox"/> Municipal Waste Operation	GCSL #100265
<input type="checkbox"/> Coal Ash Beneficial Use Operation		<input type="checkbox"/> Public Water Supply System	
<input type="checkbox"/> Coal Mining Operation		<input type="checkbox"/> Radiation Facility	
<input type="checkbox"/> Commercial Hazardous Waste Operation		<input type="checkbox"/> Residual Waste Operation	
<input type="checkbox"/> Encroachment Location (water, wetland)		<input type="checkbox"/> Storage Tank Location	
<input type="checkbox"/> Erosion & Sediment Control Facility		<input type="checkbox"/> Water Pollution Control Facility	
<input type="checkbox"/> Industrial Minerals Mining Operation		<input type="checkbox"/> Other:	

Latitude/Longitude Point of Origin	Latitude			Longitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
CNTAR	40°	51'	34"	-75°	15'	41"

PROJECT INFORMATION

Project Name

Slate Belt Heat Recovery Center

Project Description

The project involves drying dewatered biosolids to produce a Class A biosolid products that will be beneficially used as a fertilizer blending agent, soil conditioner, and/or a renewable fuel product. No process wastewater will be discharged from the facility. Stormwater will runoff as sheet flow to GCSL's sediment basin #2.

Project Consultant Last Name

Pullar

First Name

Thomas

MI

G.

Suffix

P.E.

Project Consultant Title

Senior Project Manager

Consulting Firm

EarthRes Group, Inc.

Mailing Address Line 1

P.O. Box 468

Mailing Address Line 2

6912 Old Easton Road

Address Last Line – City

Pipersville

State

PA

ZIP+4

18947

Phone

(215) 766-1211

Ext

FAX

(215) 766-1245

Email Address

TPullar@earthres.com

1. Is this application for an authorization type on the list of authorizations affected by the land use policy? Yes No

Note: If "Yes", you must complete the General Information Form (1300-PM-BIT0001) instead of this form.

COORDINATION INFORMATION

Note: The PA Historical and Museum Commission must be notified of proposed projects in accordance with DEP Technical Guidance Document 012-0700-001 and the accompanying Cultural Resource Notice Form, if applicable.

If the activity will be a mining project (i.e., mining of coal or industrial minerals, coal refuse disposal and/or the operation of a coal or industrial minerals preparation/processing facility), respond to questions 1.0 and 2.0 below.

If the activity will not be a mining project, skip questions 1.0 and 2.0 and begin with question 3.0.

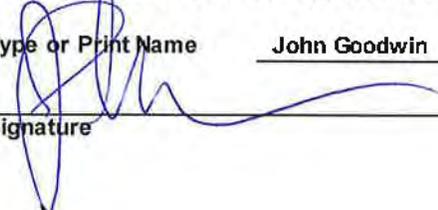
- | | | | | | |
|-------|---|-------------------------------------|-----|-------------------------------------|-----------|
| 1.0 | Is this a coal mining project? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form. | <input type="checkbox"/> | Yes | <input type="checkbox"/> | No |
| 2.0 | Is this a non-coal (industrial minerals) mining project? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form. | <input type="checkbox"/> | Yes | <input type="checkbox"/> | No |
| 3.0 | Will your project, activity, or authorization have anything to do with a well related to oil or gas production, site development for such activity, or the waste from such a well? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form. | <input type="checkbox"/> | Yes | <input checked="" type="checkbox"/> | No |
| 4.0 | Will the project involve a construction activity that results in earth disturbance? If "Yes", specify the total disturbed acreage. (DEP Use/4x66) | <input checked="" type="checkbox"/> | Yes | <input type="checkbox"/> | No |
| 4.0.1 | Total Disturbed Acreage | | | | 6.3 acres |

5.0	Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water (including wetlands)? (DEP Use/4x66) (Modify GCSL Sediment Basin #2)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
6.0	Will the project involve discharge of industrial wastewater or stormwater to a dry swale, surface water, ground water or an existing sanitary sewer system or separate storm water system? If "Yes", discuss in <i>Project Description</i> . (DEP Use/4x62) (NPDES permit for stormwater runoff into non-discharging Sediment Basin #2)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
7.0	Will the project involve the construction and operation of industrial waste treatment facilities? (DEP Use/4x62) DOA submitted with this application	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
8.0	Will the project involve construction of sewage treatment facilities, sanitary sewers, or sewage pumping stations? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form. (Authority contacted; grinder pump will convey sanitary wastewater to Pen Argyl Municipal Authority)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
9.0	Is this project for the beneficial use of biosolids for land application within Pennsylvania? If "Yes" indicate how much (i.e. gallons or dry tons per year). (DEP Use/4X62)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
	9.0.1 Gallons Per Year (residential septage) _____				
	9.0.2 Dry Tons Per Year (biosolids) _____				
10.0	Does the project involve construction, modification or removal of a dam? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
11.0	Will the project interfere with the flow from, or otherwise impact, a dam? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
12.0	Will the project involve operations (excluding during the construction period) that produce air emissions (i.e., NOX, VOC, etc.)? If "Yes", identify each type of emission followed by the amount of that emission. (DEP Use/4x70)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
	12.0.1 Enter all types & amounts of Emission calculations provided in Plan Approval Application emissions; separate each set with under separate cover. semicolons.				
13.0	Is an on-site drinking water supply (well), other than individual house wells, proposed for your project? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
14.0	Will your project involve purchasing water in bulk, excluding during the construction period? If "Yes", name the provider. Also, indicate the daily number of employees or guests served. (DEP Use/4x81)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
	14.0.1 Provider's Name _____				
	14.0.2 Number of Employees/Guests _____				
15.0	Is your project to be served by public water supply? If "Yes", indicate name of supplier and attach letter from supplier stating that it will serve the project. (DEP Use/4x81)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
	15.0.1 Supplier's Name Pennsylvania American Water				
	15.0.2 Letter of Approval from Supplier is Attached	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
16.0	Will this project involve a new or increased drinking water withdrawal from a stream or other water body? If "Yes", provide name of stream. (DEP Use/4x81)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
	16.0.1 Stream Name _____				
17.0	Will the construction or operation of this project involve treatment, storage, reuse, or disposal of waste? If "Yes", indicate what type (i.e., hazardous, municipal (including infectious & chemotherapeutic), residual) and the amount to be treated, stored, re-used or disposed. (DEP/Use4x32)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
	17.0.1 Type & Amount Biosolids: 400 wet tpd at an average of 21% total solids (84 dry tpd;30,660 dry tons / year)				
18.0	Will your project involve the removal of coal, minerals, etc. as part of any earth disturbance activities? (DEP Use/48y1)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
19.0	Does your project involve installation of a field constructed underground storage tank? If "Yes", list each Substance & its Capacity. Note: Applicant may need a Storage Tank Site Specific Installation Permit. (DEP Use/2570)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
	19.0.1 Enter all substances & capacity of each; separate each set with semicolons. _____				

- 20.0 Does your project involve installation of an aboveground storage tank greater than 21,000 gallons capacity at an existing facility? Yes No
If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. (DEP Use/2570)
20.0.1 Enter all substances & capacity of each; separate each set with semicolons.
- 21.0 Does your project involve installation of a tank greater than 1,100 gallons which will contain a highly hazardous substance as defined in DEP's Regulated Substances List, 2570-BK-DEP2724? Yes No
If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. (DEP Use/2570)
21.0.1 Enter all substances & capacity of each; separate each set with semicolons.
- 22.0 Does your project involve installation of a storage tank at a new facility with a total AST capacity greater than 21,000 gallons? Yes No
If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. (DEP Use/2570)
22.0.1 Enter all substances & capacity of each; separate each set with semicolons.
300,000 gal wastewater tank
5,000 gal sulfuric acid (H2SO4) (Acid) Tank
3,000 gal sodium hydroxide (NAOH) (Caustic) Tank
5,000 gal sodium hypochlorite (NaOCl) (Bleach) Tank

CERTIFICATION

I certify that I have the authority to submit this application on behalf of the applicant named herein and that the information provided in this application is true and correct to the best of my knowledge and information.

Type or Print Name John Goodwin
Signature  Title Vice President-Engineering Date 3/13/2018

FORM 20
CHECKLIST



CHECKLIST – MUNICIPAL OR RESIDUAL WASTE GENERAL PERMIT (New Permit, Registration, or Determination of Applicability)

This checklist is to assist the Department and the Applicant in assuring that all the forms, notices, documentation and fees required for an application for a municipal or residual waste general permit have been addressed. This checklist should be signed by the Applicant and submitted to the Department as part of the application package. Failure to do so may cause the application to be administratively incomplete and ineligible for Permit Decision Guarantee (PDG).¹

This checklist will be utilized by the Department and Applicant during the pre-application meeting to indicate the forms and other information which must be included in the application and public notifications that are needed. The Department will check the appropriate box in the first two columns to indicate the forms and information required ("Req") or not applicable ("N/A"). The Applicant will then ensure the required forms and information are included in the application by checking the corresponding box in the third column.

In cases where no pre-application meeting is held, the Applicant will indicate what forms are included in the application by checking the appropriate boxes in the third column.

The most current version of the forms found on the Department's online eLibrary should be utilized.

Name of Applicant or Permittee Slate Belt Heat Recovery Center, LLC Permit No. (if applicable) WMGR097

Links to the Department Website for All GP Application Forms:

Municipal Waste	http://www.portal.state.pa.us/portal/server.pt?open=514&objID=589661&mode=2
Residual Waste	http://www.portal.state.pa.us/portal/server.pt?open=514&objID=589686&mode=2

Standard Permit Forms

Req.	N/A	√	Name	Form No. (Municipal)	Form No. (Residual)
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	General Information Form (GIF)	2540-PM-BWM0515 Or 1300-PM-BIT0001	2540-PM-BWM0515 Or 1300-PM-BIT0001
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form 20 - Application For a Municipal or Residual Waste General Permit	2540-PM-BWM0397	2540-PM-BWM0397
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form B - Professional Certification	2540-PM-BWM0358	2540-PM-BWM0358
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form E-GP - Contractual Consent of Landowner	2540-FM-BWM0217	2540-FM-BWM0217

¹DISCLAIMER: The process and procedures outlined in this Checklist are intended to supplement existing requirements. Nothing in the Checklist shall affect regulatory requirements.

The process, procedures and interpretations herein are not an adjudication or a regulation. There is no intent on the part of DEP to give the rules in this Checklist that weight or deference. This document establishes the framework within which DEP will exercise its administrative discretion in the future. DEP reserves the discretion to deviate from this policy statement if circumstances warrant.

DEP reserves the right to supplement the list of forms and information included on this Checklist at any time during the permit review process. This Checklist should not be construed as an exhaustive list of forms and information to be submitted by the Applicant.

Standard Permit Forms (cont.)

Req.	N/A	√	Name	Form No. (Municipal)	Form No. (Residual)
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form HW-C - Compliance History	2540-FM-BWM0058	2540-FM-BWM0058
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form L - Contingency Plan	2540-PM-BWM0384	2540-PM-BWM0384
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Form R1 - Waste Analysis and Classification	2540-PM-BWM0001	2540-PM-BWM0001
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form 20IC – Application for an Infectious/Chemotherapeutic Waste Processing Permit (WMGI005, WMGI007, WMGI010, and WMGI014 ONLY)	2540-PM-BWM0124	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form 20RF - Application for a Regulated Fill General Permit (WMGR096 ONLY)		2540-PM-BWM0403
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form 27M - Acceptance of General Permit Conditions	2540-PM-BWM0146	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form 27R - Acceptance of General Permit Conditions		2540-PM-BWM0145

Additional Permit Forms (if required)

Req.	N/A	√	Name	Form No. (Municipal)	Form No. (Residual)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form D - Environmental Assessment	2540-PM-BWM0172	2540-PM-BWM0172
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form G(A) - Air Resource Protection	2540-FM-BWM0391a	2540-FM-BWM0391a
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form G(B) - Non Methane Organic Compounds (NMOC) Emissions Estimate	2540-FM-BWM0391b	2540-FM-BWM0391b
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form X - Radiation Protection Action Plan	2500-FM-BWM0430	2500-FM-BWM0430
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form 5 - Map Requirements	2540-PM-BWM0154	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form 5R - Map Requirements		2540-PM-BWM0363
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form 12R - Operation Plan		2540-PM-BWM0081
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form 14 - Operation Plan	2540-PM-BWM0011	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form 19R - Construction Activity Summary		2540-PM-BWM0377
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form 23R - Control Plans		2540-PM-BWM0392
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form 25R - Source Reduction Strategy	2540-PM-BWM0349	2540-PM-BWM0349
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Form 37 - Construction Activity Summary	2540-PM-BWM0012	

Bonding Worksheets

Req.	N/A	√	Name	Form No. (Municipal)	Form No. (Residual)
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Bonding Worksheet Instructions	2540-PM-BWM0580	2540-PM-BWM0580
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Processing Facilities	2540-PM-BWM0586	2540-PM-BWM0586

Public Notification Under 25 Pa. Code Chapters 271.821(f) and 287.622(e)

Req.	N/A	√	Entity
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Host Municipality: <u>Plainfield Township</u>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Host County: <u>Northampton County</u>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	County Planning Agency LVPC
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	County Health Department

Confidential Information under 25 Pa. Code Chapters 271.5 and 287.5, and the Bureau of Waste Management's "Procedures for Handling Confidential Information Requests" document.

Req.	N/A	√	Description
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If proposed by the applicant, a demonstration that application information satisfies the regulatory requirements for confidentiality.

Registration with Pennsylvania Department of State

Req.	√	Name	Form No.
<input type="checkbox"/>	<input type="checkbox"/>	Pennsylvania Enterprise Registration	PA-100

Application Fee

Req.	N/A	√	Authorization Type	Amount
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	General Permit (municipal waste only)	\$1,000
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	General Permit (residual waste only or municipal/residual waste mixture)	\$2,000
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Registration	\$250
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Determination of Applicability	\$500

Additional Application Copies

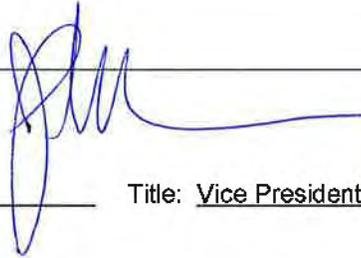
Req.	N/A	√	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	One original and <u>5</u> additional copies of the application

Public Notification and Comment Under 25 Pa. Code Chapters 271.823 and 287.623

<input checked="" type="checkbox"/>	Type
<input type="checkbox"/>	Publication in the Pennsylvania Bulletin
<input type="checkbox"/>	60-day Public Comment Period
<input type="checkbox"/>	Public Hearing(s) may be required

Notes/Additional Comments

Signature of Applicant or Authorized Representative:



Date:

8/13/2018

Printed Name: John Goodwin

Title: Vice President - Engineering

FORM 20

APPLICATION FOR MUNICIPAL OR RESIDUAL WASTE PERMIT

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

DEP USE ONLY	
Client ID: _____	APS ID: _____
Auth ID: _____	Site ID: _____
General Permit ID: _____	

FORM 20

APPLICATION FOR A MUNICIPAL OR RESIDUAL WASTE GENERAL PERMIT

This Form must be fully and accurately completed. All required information must be typed or legibly printed in the spaces provided. If additional space is necessary, attach separate sheet(s) to this Form.

SECTION A. GENERAL INFORMATION

Check New Permit (Residual Waste: \$2000. Permit Modification (\$300) Determination of Applicability (\$500) under general permit _____
 One: Municipal Waste: \$1000) under general permit Registration (\$250) under general permit WMG _____
 Permit Renewal (\$300) WMG _____

SECTION B. APPLICANT INFORMATION

Organization Name or Registered Fictitious Name: Slate Belt Heat Recovery Center, LLC	Contact Person: Last Name <u>John</u> First Name <u>Goodwin</u> MI _____ Suffix _____ Title <u>Vice President - Engineering</u>
Employer ID (EIN) #: 45-4824177	Mailing Address: Street <u>435 Williams Court, Suite 100</u> P.O. Box (if applicable) _____ City <u>Baltimore</u> State <u>MD</u> Zip + 4 <u>21220-2888</u>
Dun & Bradstreet ID #:	Telephone: <u>(443) 489-9069</u> Fax: <u>()</u> Email: <u>jgoodwin@synagro.com</u>

SECTION C. SITE INFORMATION

Site Name: <u>Slate Belt Heat Recovery Center</u>	Location: County <u>Northampton</u> Municipality <u>Plainfield</u> <input type="checkbox"/> City <input type="checkbox"/> Borough <input checked="" type="checkbox"/> Twp.
Site Address: Street <u>2100 Block of Pen Argyl Road</u> City <u>Pen Argyl</u> P.O. Box (if applicable) _____ State <u>PA</u> Zip + 4 <u>18072</u>	Site Contact Person: Last Name <u>John</u> First Name <u>Goodwin</u> MI _____ Suffix _____ Title <u>Vice President - Engineering</u> Telephone: <u>(443) 489-9069</u>
Site NAICS Codes (2 & 3 Digit Codes List All That Apply): <u>562</u>	Email: <u>jgoodwin@synagro.com</u> Fax: <u>()</u>
Site NAICS Codes (6-Digit Codes Optional): <u>552219</u>	Applicant to Site Relationship: <u>OWNOP</u>
Size of Site: <u>12.05</u> (Acres)	Property Size: <u>12.05</u> (Acres)
Site Latitude: Degrees <u>40°</u> Minutes <u>51'</u> Seconds <u>37.36"</u>	Site Longitude: Degrees <u>-75°</u> Minutes <u>15'</u> Seconds <u>56.65"</u>

Property owner in which the site is located: Grand Central Sanitary Landfill, Inc.

Detailed Directions to Site: Take Route 33 to the Route 512 Wind Gap/Pen Argyl exit. Off the exit, turn onto Route 512 North (a right turn from Route 33 Northbound). Follow Route 512 through Wind Gap, turning right at the Turkey Hill in Wind Gap (3rd traffic light) to stay on Route 512. After 1.4 miles, turn right into Waste Management's Grand Central Sanitary Landfill. The entrance to the Slate Belt Heat Recovery Center will be on the right.

SECTION D. CONSULTANT INFORMATION

Company Name: EarthRes Group, Inc.
Mailing Address: Street 6912 Old Easton Road
P.O. Box (if applicable) P.O. Box 468
City Pipersville
State PA Zip + 4 18947

Consultant: Last Name Pullar
First Name Thomas
MI G Suffix P.E.
Title Senior Project Manager
Telephone (215) 766-1211
Fax (215) 766-1245
Email TPullar@earthres.com

SECTION E. PROJECT INFORMATION

Project description. If additional space is necessary, attach separate sheet(s) to this Form. See attached Narrative

1. Type and amount or volume of waste estimated in the proposed beneficial use activities (use a separate sheet, if necessary)
Biosolids: 400 wet tons per day (84 dry tons/day; 30,860 dry tons/year)
2. Attach a copy of Form HW-C (Compliance History).
3.
 - a. If processing prior to beneficial use is proposed:
 - i. Attach a copy of Form B (Professional Certification).
 - ii. Attach a copy of the General Information Form (GIF).
 - b. If beneficial use only is proposed, submit a copy of Form B (Professional Certification) if required.
4. Attach a copy of Form E-GP (Contractual Consent of Landowner for A General Permit).
The Form E-GP (Contractual Consent of Landowner for A General Permit) is not required to be recorded in the Recorder of Deeds Office if agricultural utilization by land application of residual waste is involved.
5. Waste Processing Descriptions – Note: Omit this section if the application is for beneficial use only.
 - a. Provide, on 8-1/2" x 11" paper, flow schematics of waste processing starting with the municipal or residual waste and ending with the proposed waste material to be covered by the general permit for beneficial use. Include a description of the equipment involved, the waste material added and the nuisance control plan.
 - b. Plan for alternative management of waste during periods when the facility is not in operation, including procedures to be followed in case of equipment breakdown.

Note: All information contained in this section will be made available to the public unless clearly labeled as confidential. If the entire process concept is considered proprietary or otherwise confidential, an application for an individual processing permit should be submitted instead of this application for a general permit. Claim of confidentiality shall address the following:

 - A. The portions of the information claimed to be confidential.
 - B. The length of time the information is to remain confidential.
 - C. The measures taken to guard undesired disclosures of the information to others.
 - D. The extent the information has been disclosed to others and the precautions taken in connection with that disclosure.
 - E. A copy of pertinent confidentiality determinations by EPA or any other federal agency.
 - F. The nature of the substantial harm to the competitive position by disclosure if the information is considered non-confidential, the reason it should be viewed as substantial, and the relationship between the disclosure and the harm."
6. Contingency Plan – A contingency plan, relating to emergency procedures, must be developed and implemented for the proposed waste management facility. The plan must include a Preparedness, Prevention and Contingency (PPC) Plan that is consistent with the Department's most recent guidelines.
["http://164.156.71.80/VWRQ.asp?docid=2087d8407c0e000000000890000089&context=2&backlink=WXOD.aspx%3f%3d2087d8407c0e000080000820000082%26ft%3d1"](http://164.156.71.80/VWRQ.asp?docid=2087d8407c0e000000000890000089&context=2&backlink=WXOD.aspx%3f%3d2087d8407c0e000080000820000082%26ft%3d1)
(Note: Depending on the complexity of the proposed processing operations, the Department may require completion of Form L – Contingency Plan for Emergency Procedures).
7. Provide proof that a Pennsylvania Natural Diversity Inventory (PNDI) Project Planning Environmental Review was conducted. The review can only be conducted via the internet at the www.naturalheritage.state.pa.us/ website. First time users will have to register at the website before conducting the review. A receipt is automatically available for printing upon completion of the PNDI review. This receipt must be submitted as part of this application.
8. Facility Map – Provide a drawing of the proposed permit and adjacent areas in a scale of 1 inch equals no more than 50 feet with 2-foot maximum contour intervals showing the following:
 - i. Boundaries
 - ii. Access roads (include slopes, grades, dimensions), easements, right-of-way, and other property interests for proposed permit area.
 - iii. Barriers, fences, and similar structures required for access control.
 - iv. Storm water control features, erosion and sedimentation controls, treatment, storage, and discharge facilities.
 - v. Surface water bodies: springs, streams, lakes, ponds, wetlands, constructed or natural drains, and irrigation ditches.
 - vi. Water diversion, collection, conveyance, erosion and sedimentation control, treatment, storage, and discharge facilities.
 - vii. Residual or municipal waste storage and loading/unloading areas.
 - viii. All buildings and related facilities used in the operation of the facility. This must include horizontal and vertical dimensions.
 - ix. Processing pads, tipping areas, storage areas, and windrows (including leachate or wastewater collection systems).
 - x. Areas for which a bond will be posted, if required by the Department.
9. Location Map – Provide a copy of USGS 7-1/2 minute quadrangles, topographic map or equivalent map, identifying location of the proposed facility.
10. Supply proof of contact with host municipality and county regarding submittal of this application.
11. Describe the impact the operations may have on local traffic and any measures that will be implemented to minimize the impact.
12. For processing facilities, does the applicant have a Highway Occupancy Permit for this facility issued by PennDOT or by the local municipality? If yes, please attach the permit and any conditions. If no, please explain.

Note: Prior to submitting an application for a determination of applicability, registration or permit renewal, the applicant should review the general permit and make sure the application contains information to address the requirements in the general permit. For example, for general permits that contain siting restrictions, relevant features (schools, streams, occupied dwellings, etc.) should be shown on the map. For features that are not found on the map, a statement should be included in the narrative that they are not present within the restricted distances. The applicant should contact the appropriate regional office if they have any questions as to what information should be included in their application.

SECTION F. CHEMICAL ANALYSIS

As specified in §271.611 and §287.132, a chemical analysis of the waste material that is proposed to be processed and/or for beneficial use shall be performed by a laboratory accredited or registered for accreditation under the Pennsylvania Environmental Laboratory Accreditation Act, Act of 2002, No. 25, and as indicated below:

No single analytical method is applicable for all waste streams and some modifications may be necessary for unusual waste types. Any modifications, however, must be approved by the Department. Sample(s) shall be collected, preserved and holding times adhered to in accordance with EPA or ASTM requirements. Samples for organic volatile parameters shall be collected in a manner to minimize loss of the parameters. Procedures used for sample collection and preservation must be stated along with dates of collection, laboratory receipt and analysis. The person collecting the sample should be identified.

Note: The Department may require analysis for other constituents not listed below if the additional data may aid in determining whether the proposed use is beneficial, whether there will be harm or threat of harm to humans or the environment, or whether they could otherwise limit the proposed activity.

1. Chemical Analysis of Municipal or Residual Waste for a registration or a DOA application – The analysis of the unprocessed and/or processed waste must include the following:
 - i. Analytical requirements identified in the general permit for unprocessed and/or processed waste.
 - ii. Hazardous waste determination – As required under 40 CFR 262.11, as incorporated by reference at 25 Pa. Code 262a.1.
 - iii. Any other parameters identified by the generator, processor, or person who will beneficially use the waste as those which are important to or potentially limiting to the proposed processing or beneficial use of the waste.
2. Chemical Analysis of Municipal or Residual Waste for a new general permit – The analysis of the proposed waste must include the following:
 - i. Analytical requirements as required by the Department.
 - ii. Any other parameters identified by the processor, or person who will beneficially use the waste as those which are potentially limiting to the proposed processing or beneficial use of the waste.

Note: This section does not apply to transfer facilities that only store municipal or residual waste.

SECTION G. CERTIFICATION

I, JOHN P. GOODWIN (please print) do hereby acknowledge that I am an official of the Company making a new application/renewal application/registration/determination of applicability and that I have read, understand, and/or accept the terms and Conditions of the General Permit identified in Section A, and I have informed the appropriate Company personnel of the requirements of the identified general permit.

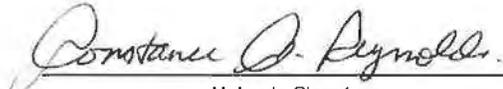
I, JOHN P. GOODWIN do hereby certify pursuant to the penalties of 18 Pa. C.S.A. §4904 to the best of my knowledge, information, and belief that the information contained in this document is true and correct.

	UP-ENGINEERING	3/13/2018
Signature	Title	Date

Notary's Seal:

Taken, sworn, and subscribed before me, this 13th day of March, A.D. 2018

Constance A. Reynolds
 Notary Public
 Anne Arundel County, Maryland
 My Commission Expires
 September 28, 2019


 Notary's Signature

FORM 20
SUPPLEMENTAL NARRATIVE

FORM 20: APPLICATION FOR A MUNICIPAL OR RESIDUAL WASTE GENERAL PERMIT

SECTION E. – PROJECT INFORMATION – Supplemental Narrative

1. Type and amount or volume of waste estimated in the proposed beneficial use activities:

The rated capacity is 400 wet tons per day, or 84 dry tons/day (30,660 dry tons/year) on a 21% dry solids content.

2. Attach a copy of Form HW-C (Compliance History).

Form HW-C is included in this application.

3. If processing prior to beneficial use is proposed:

Processing prior to beneficial use is currently proposed. Therefore:

i. Attach a copy of Form B (Professional Certification).

Forms B/B1 are included in this application.

ii. Attach a copy of the General Information Form (GIF).

The General Information Form (GIF) is included in this application.

4. Attach a copy of Form E-GP (Contractual Consent of Landowner for A General Permit).

The Form E-GP has been included in this application.

5. Waste Processing Descriptions – Note: Omit this section if the application is for beneficial use only.

a). Provide, on 8-1/2” x 11” paper, flow schematics of waste processing starting with the municipal or residual waste and ending with the proposed waste material to be covered by the general permit for beneficial use. Include a description of the equipment involved, the waste material added and the nuisance control plan.

Schematic

A site location map is included as Figure 1 in Attachment A of this application. The schematic of the SBHRC process is included in Figure 2 in Attachment A. The site plan is included as Figure 3 of Attachment A. A process layout is provided in Figure 4 of Attachment A.

Equipment/Process Description:

The proposed process involves the transporting of dewatered biosolids to the proposed Facility where it will be thermally dried to produce a Class A biosolid that can be used as a fertilizer, soil conditioner, and/or a renewable fuel product. Class A biosolids must meet the requirements established under 25 Pa. Code §271.932(a) in regard to pathogens and 25 Pa. Code §271.933(b)(1)–(8) relating to vector attraction reduction, is nonliquid, and is unrecognizable as human waste.

Incoming vehicles containing biosolids will enter GCSL's site off of S.R. 512 and proceed to the scales. Vehicles will pass through radiation detectors and weigh-in before proceeding to the proposed SBHRC. The vehicles will follow the GCSL Radiation Monitoring Plan as required. After leaving the scales, the vehicles will proceed onto the GCSL access road and enter the SBHRC facility.

Once the vehicles arrive at the SBHRC they will check in and process the required paperwork (See Form R1). When approved, the vehicle will back onto the truck tipping platform, the lid to the receiving unit will be opened, and the vehicle will be unloaded into the receiving unit. After the biosolids are unloaded, the lid will be closed. Drivers will clean the tailgates to prevent material leakage or spillage. This wash water will be captured and conveyed to the process wastewater storage tank, and ultimately transported for offsite disposal.

The biosolids delivery vehicles will be capable of hauling process wastewater. Separate contract haulers may also be used to transport process wastewater offsite. Before the delivery vehicles can be filled with process wastewater for disposal they will need to exit the SBHRC and drive back to the GCSL scales to weigh out. After weighing out, these delivery vehicles will proceed back to the SBHRC to be loaded with process wastewater from the storage tank for off-Site disposal. A flow meter will be used to track the transferred volume and eliminate the need for these vehicles to be weighed again on their way off-Site. The platform these delivery trucks are filled on provides containment for material, wash water and accumulated stormwater.

The receiving unit, consisting of two concrete vaults each with approximately 284 tons of capacity, have slow speed walking floors that transport the biosolids to covered conveyors at the respective biosolids feed pump inlet. The biosolid materials are transferred, by a redundant arranged pumping system, to either of two parallel drying lines, identified as Dryer Line #1 or Dryer Line #2. Biosolids are pumped to a mixer where it is mixed with previously dried recycled material. The amount of wet material and recycled dry material are independently controlled by the operator to allow for varying moisture content of the supplied wet material. The mixture is then directed to, and dispersed on to, the two pass traveling belts where indirectly heated air is introduced. The hot process air is introduced above the top belt and biosolids are in direct contact

with process air as the material travels along the dryer belts. The hot process air warms the biosolids up to 85 degrees Celsius while on the belts, and a moisture content of less than 10% at the dryer exit.

Product exiting the belt is conveyed to either the back-mix process or the storage silos. All product conveyance is conducted in enclosed equipment, such as screw conveyors, bucket elevators, or drag conveyors. Truck loading of finished product occurs at the truck loading station located directly under the storage silos. The silos can hold approximately 300 tons of product each. The truck loading equipment is a dedicated conveyor system and controls loadout to minimize potential product spills.

Neighboring the proposed SBHRC is the LFGTE plant that was specifically designed to allow for the future use of waste heat. The dryers utilize waste heat from the neighboring GKEDC facility to heat thermal oil. The thermal oil heat is used to facilitate the evaporation of moisture from the incoming biosolid material, after which the oil is returned to the thermal expansion tank for reheating.

The existing turbine stacks located at the LFGTE plant will be retrofitted with a heat exchanger that will remove waste heat and then, by duplex pump system, transfer that heat via a thermal oil loop to the drying process. There will also be a supplemental thermal oil boiler connected to the thermal oil loop, and it may be used to add heat to the thermal oil loop as needed. The supplemental thermal oil boiler can be fueled by using natural gas or landfill gas.

The dryer units and all associated processes will be enclosed. All process air will vent to a non-contact condenser chemical odor control system for odor control and cleaning the exhaust gases that are removed from the recycled process air stream resulting in the negative pressure dryer operating condition. Process wastewater generated by the drying process includes condenser water, cleaning (wash down) water, scrubber blowdown, and drainage from truck loading pads. Process wastewater will be transferred, by redundant pumping system, to the onsite 300,000 gallon storage tank, where it will be stored until it is transported to an approved off-site treatment facility. A generation rate of 100,000 gallons per day has been estimated. Therefore, three days of storage is provided. Sanitary wastewater originating from the office and restrooms will be conveyed to the local publicly owned treatment works operated by the Pen Argyl Municipal Authority. A sanitary wastewater generation rate of 1,120 gallons per day has been calculated. There will be no wastewater discharges into local waterbodies.

By the time the biosolid materials reach the end of the Dryer Lines, the finished dried product will be classified as a Class A Biosolid product. All process air will be sent to the non-contact condenser. The resulting condensed process wastewater will be

conveyed to the proposed 300,000 gallon process wastewater storage tank prior to transportation to off-site disposal.

The final Class A biosolid product is conveyed from the end of the Dryer Lines to one of the two proposed product storage silos. Class A dried product is loaded into trailers staged in the area under the product storage silos. The area is enclosed by the silo skirts and provides containment for any spills, in addition to preventing stormwater from entering the area, during the loading process.

Deliveries and product removal to/from the Facility will be restricted to the same permitted hours (6:00 AM to 6:00 PM, Monday through Saturday; closed Sundays and holidays) as the Grand Central Sanitary Landfill (GCSL). However, the proposed facility will operate continuously to process biosolids, operate control equipment and maintain site facilities. There will be access to the SBHRC facility for employees and essential personnel 24 hours per day, 7 days per week.

NUISANCE CONTROL PLAN

SBHRC understands the major process components, how to control potential nuisances and treat sources associated with each, and has done so for the SBHRC project with learnings and experience from over 20 years of successful biosolids thermal drying facilities design and operations located in populated areas throughout the United States.

The facility shall be operated and maintained in such a manner as to minimize any potential health hazards, odors, dust, noise, environmental degradation, unsightliness, the attraction, harborage or breeding of insects, rodents or vectors and to eliminate conditions which create safety hazards or impose an undue burden upon nearby residents or its local services/infrastructure, by operation of the facility in compliance with all necessary permits, in a fully enclosed facility, with no waste water discharge into local creeks, as discussed above and as shown on the plans. Inbound material offloading is confined to the receiving units. When the truck is in position, the lid of the receiving unit will be opened, and the tipping pad will raise the trailer to unload the biosolids into the unit. Once the vehicle is unloaded, the tipper will lower the vehicle and the lid of the receiving unit will be closed. The truck will pull forward on the pad and the tailgate will be washed to remove residual biosolids. Wash water will be captured and conveyed to the storage tank.

Trailers will proceed to the scales and weigh out. Trailers may return to the SBHRC site to be filled with process wastewater pumped from the 300,000 gallon aboveground storage tank. A metered fill station connects to the truck with positively sealed fittings and ensures fill volumes do not exceed the truck tank capacity. Outbound product is loaded into trailers under one of two enclosed product storage silos. A retractable

loading nozzle controls product loadout. When full, product trailers will proceed to the landfill scale to weigh out and depart the site.

Odor

Potential odor sources at the SBHRC that will be effectively controlled through the design and operation of the facility are as follows:

- Biosolids receiving/storage
- Belt dryer system
- Product storage silo
- Process wastewater storage

The biosolids receiving/storage process has the potential to generate odors, primarily hydrogen sulfide (H₂S) and ammonia (NH₃), associated with biosolids storage. The receiving units are designed to contain 1.5 days of biosolids feedstock, which serves to minimize odors. The truck tipping equipment will be cleaned to remove biosolids. The biosolids receiving unit will be fully covered when not receiving material. The lid will be opened when vehicles unload incoming biosolids, and closed when the vehicle has finished. The receiving unit is designed with live-bottom floors to facilitate unloading as first in/first out to minimize the potential for odor generation due to prolonged storage. Potential odors from the receiving / storage process will be actively ventilated from the headspace of the tanks as source control, with routing of the collected air to the odor control system. The odor control system will be designed specifically to reduce hydrogen sulfide, ammonia and other odorous compounds effectively.

The belt dryer system will generate ammonia associated with the off-gassing from the heat treatment during the drying process. The belt dryers are fully enclosed and operate in a negative air pressure manner, such that all off-gassing during the thermal treatment of the biosolids is contained within the dryer system itself. The bulk of the airstream is recycled in the dryer system after moisture, containing ammonia, is condensed and transported to the process wastewater storage facility. There will be a small saturated airstream not recycled and removed from each of the belt dryers. The remaining air stream is routed to the odor control system, which is designed to reduce ammonia effectively.

The product contained within the storage silo has the potential to generate minor odors primarily from any remaining ammonia off-gassing. The product storage silo will have a ventilation air system maintaining negative pressure condition on the headspace of the silo, which will be routed to the odor control system, which is designed to reduce ammonia effectively.

The process wastewater storage tank has the potential to be a minor source of odor related to the ammonia conditions via thermal dryer condensate and odor control system process wastewater storage. Flow from the covered process wastewater storage tank will be included in the odor control system as a negative pressure headspace source, to be routed to the odor control system, which is designed to reduce ammonia effectively.

The building odor control system will be installed with target discharge concentrations as follows:

- Hydrogen sulfide (H₂S) Up to 1.5 ppm - OSHA states acute (short-term) exposure to 0.01 to 1.5 ppm is the odor detection threshold that is perceivable by the human sense of *smell*. Odor becomes more noticeable at 3-5 ppm
- Ammonia (NH₃) Up to 2 ppm - OSHA states the odor threshold for NH₃ is 5 ppm. American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE) reports that people notice the presence of ammonia at 1 ppm in a closed room. (reference: Smyth, 1956 as cited in Memarzadeh F. 2005. Control of ammonia production in animal research facilities through ventilation system design. ASHRAE)

Compared to OSHA and ASHRAE published literature, the process air odor control system will be designed to remove hydrogen sulfide and ammonia from the process air stream below nuisance level at the outlet of the process and prior to discharge. All discharge air will be further subject to immediate atmospheric dispersion, further minimizing the potential for any off-site odor nuisance conditions. The proposed facility is being designed to eliminate any nuisance odors. This is a goal achieved at other facilities operated by the Applicant's affiliates and is a key design objective.

Noise

As noted, the process will occur within an enclosed building. The Occupational Safety and Health Administration's (*OSHA's*) *Noise standard* (29 CFR 1910.95) requires employers to have a hearing conservation program in place if workers are exposed to a time-weighted average (TWA) *noise level* of 85 decibels (dBA) or higher over an 8-hour work period. The noise levels within the SBHRC are anticipated to be well below 85 dBA based on discussions with the equipment supplier and experience at similar facilities in operation. The process is a slow and steady drying process and the largest source of noise will be the dryer exhaust fans, which generate 80 dBA but will be fully enclosed.

Although no noise measurements are available for this exact facility as it is not yet operating, we can conservatively assume the noise level is at or below 85 dBA. The proposed building itself will provide noise reduction. Published acoustical performance

of metal building insulation (referenced from NAIMA, the North American Insulation Association) note that the average reduction from a R10 thermal insulated metal building is approximately 29 dBA. The resulting noise level would be approximately 55 dBA at the exterior of the building and would be lower at the property line. The operational noise levels will be in compliance with the Plainfield Township Zoning Ordinance.

Truck movements will create noise during daily operations. Biosolids will be accepted and transported from 6:00 a.m. to 6:00 p.m. Monday through Saturday. No biosolids will be accepted on Sundays or major holidays. Operations will be continuous for biosolids processing and facility maintenance. The operating hours of the processing facility do not fall within the time periods with noise limitations as noted in the Township Zoning ordinance (7:00 a.m. to 10:00 p.m.), with the exception of Sundays and legal holidays for Commercial, Institutional, and/or residential noise receiving land uses. However, compliance with the Township Zoning Ordinances will be maintained.

The existing land uses surrounding the proposed site are Industrial, which have a limit of 70 dBA at any time. It is industry standard to have back-up alerts with trucks, the typical volume of 97–112 decibels (dB) at the source. Assuming the maximum level of 112 dBA and using the Inverse Square Law, the resulting noise level at Pen Argyl Road, 150-feet from truck movements, would be 68.5 dBA. This noise level will be in compliance with this standard, which is exceeding the requirements of the Plainfield Township Zoning Ordinance, which excludes from that requirement temporary noise from alerts under Zoning Ordinance §27-511.4.D and F.

Dust

The SBHRC process is fully enclosed and provided with an odor control system that will draw air from the process through a two-stage scrubber unit prior to exhaust through the stack. Potential dust from the product conveyance and storage silos will be removed by a dust collector prior to treatment in the odor control system.

Site activities involving vehicular movements will take place on paved surfaces and gravel-covered areas. The potential for fugitive emissions from these areas will be controlled through the application of water as needed.

Litter

The nature of the biosolids handled by SBHRC minimizes the potential for litter generation. The site will be policed as needed to remove any accumulated litter.

SBHRC manages the operation to minimize leakage and spills of product. Standard Operating Procedures (SOPs) have been developed (copy attached in Form R1) to

address spills and leaks as they occur. Truck tailgates will be washed following unloading at the receiving unit. Unloading and loading will take place within a containment area to capture any material spillage. Process wastewater load outs will take place on the same containment area. Wash and stormwater captured in this area will be conveyed to the process wastewater storage tank. Vehicles transporting materials (i.e., biosolids and product water) will comply with applicable local, state and federal transportation hauling requirements.

Vectors

SBHRC will maintain a clean operation which inherently will minimize vectors at the site. SBHRC will implement a pest control plan to prevent vectors inside the building. Vector control outside will be implemented using the following techniques:

- control of ponding stormwater
- proper management of process wastewater
- management of spills and leaks
- general site cleanliness and maintenance

b). Plan for alternative management of waste during periods when the facility is not in operation, including procedures to be followed in case of equipment breakdown.

In the event that equipment breaks down and biosolid materials are not able to be processed, the SBHRC will halt all deliveries and cease production. SBHRC will remove the material if the facility experiences an extended outage. Unacceptable material may be reprocessed or sent to an approved offsite facility.

- 6. Contingency Plan – A contingency plan, relating to emergency procedures, must be developed and implemented for the proposed waste management facility. The plan must include a Preparedness, Prevention and Contingency (PPC) Plan that is consistent with the Department’s most recent guidelines.**

The Contingency Plan for Emergency Procedures is included in this application.

- 7. Provide proof that a Pennsylvania Natural Diversity Inventory (PNDI) Project Planning Environmental Review was conducted. The review can only be conducted via the internet at the www.naturalheritage.state.pa.us/ website. First time users will have to register at the website before conducting the review. A receipt is automatically available for printing upon completion of the PNDI review. This receipt must be submitted as part of this application.**

The PNDI review has been conducted and the receipt is supplied in this application as an attachment following this narrative. Completion of the PNDI has identified a potential wildlife impact relating to Bog Turtle habitat. A Bog Turtle Habitat Survey will be completed in accordance with the requirements described in the PNDI results. No other potential impacts were identified.

- 8. Facility Map – Provide a drawing of the proposed permit and adjacent areas in a scale of 1 inch equals no more than 50 feet with 2-foot maximum contour intervals showing the following:**
- i. Boundaries**
 - ii. Access roads (include slopes, grades, dimensions), easements, right-of-way, and other property interests for proposed permit area.**
 - iii. Barriers, fences, and similar structures required for access control.**
 - iv. Storm water control features, erosion and sedimentation controls, treatment, storage, and discharge facilities.**
 - v. Surface water bodies: springs, streams, lakes, ponds, wetlands, constructed or natural drains, and irrigation ditches.**
 - vi. Water diversion, collection, conveyance, erosion and sedimentation control, treatment, storage, and discharge facilities.**
 - vii. Residual or municipal waste storage and loading/unloading areas.**
 - viii. All buildings and related facilities used in the operation of the facility. This must include horizontal and vertical dimensions.**
 - ix. Processing pads, tipping areas, storage areas, and windrows (including leachate or wastewater collection systems).**
 - x. Areas for which a bond will be posted, if required by the Department.**

The site plan is provided in Figure 3 of Attachment A. The requested information is provided on the drawing.

- 9. Location Map – Provide a copy of USGS 7-1/2 minute quadrangles, topographic map or equivalent map, identifying location of the proposed facility.**

The site location map is provided in Figure 1 of Attachment A.

- 10. Supply proof of contact with host municipality and county regarding submittal of this application.**

The municipal, county, and planning commission notification letters with delivery confirmation are provided in Attachment B of this application.

- 11. Describe the impact the operations may have on local traffic and any measures that will be implemented to minimize the impact.**

Operations are not anticipated to have any significant impact on local traffic. The following is an estimate of the truck traffic volume related to this application:

- Biosolid Vehicles: 20 inbound, 20 outbound, 40 total per day;
- Product Vehicles: 5 inbound, 5 outbound, 10 total per day;
- Wastewater Vehicles: 17 inbound, 17 outbound, 34 total per day.

This truck count is based on process wastewater transport to offsite disposal by contractors; truck trips will be reduced if backhauled by biosolids vehicles. The SBHRC traffic counts will be less than 12% of the approved design level of 716 truck trips for GCSL truck traffic, and no adverse impact on local traffic is expected.

12. For processing facilities, does the applicant have a Highway Occupancy Permit for this facility issued by PennDOT or by the local municipality? If yes, please attach the permit and any conditions. If no, please explain.

NA – This project will be completed within an existing facility. A new Highway Occupancy Permit is not required.

SECTION F. – CHEMICAL ANALYSIS – Supplemental Narrative

1. Chemical Analysis of Municipal or Residual Waste for a registration or a DOA application – The analysis of the unprocessed and/or processed waste must include the following:

i. Analytical requirements identified in the general permit for unprocessed and/or processed waste.

N/A – This project is not for a registration or DOA.

ii. Hazardous waste determination – As required under 40 CFR 262.11, as incorporated by reference at 25 Pa. Code 262a.1.

N/A – This project is not for a registration or DOA.

iii. Any other parameters identified by the generator, processor, or person who will beneficially use the waste as those which are important to or potentially limiting to the proposed processing or beneficial use of the waste.

N/A – This project is not for a registration or DOA.

2. Chemical Analysis of Municipal or Residual Waste for a new general permit.

i. Analytical requirements as required by the department.

The analytical requirements for biosolids proposed for processing at SBHRC and for finished product are provided in the Waste Analysis and Classification Plan included with this application. Additional testing will be performed if required by the Department.

ii. Any other parameters identified by the generator, processor, or person who will beneficially use the waste as those which are potentially limiting to the proposed processing or beneficial use of the waste.

Additional parameters may be tested for upon issuance of the associated general permit.

FORM B
PROFESSIONAL CERTIFICATION



Date Prepared/Revised March 2018
DEP USE ONLY
Date Received

FORM B PROFESSIONAL CERTIFICATION

This form must be fully and accurately completed. All required information must be typed or legibly printed in the spaces provided. If additional space is necessary, identify each attached sheet as Form B, reference the item number and identify the date prepared. The "date prepared/revised" on any attached sheets needs to match the "date prepared/revised" on this page.

General References: Section 271.122, 287.122

SECTION A. SITE IDENTIFIER

Applicant/permittee: Slate Belt Heat Recovery Center, LLC

Site Name: Slate Belt Heat Recovery Center

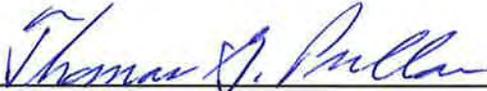
Facility ID (as issued by DEP): _____

SECTION B. REGISTERED PROFESSIONAL ENGINEER

I, Thomas G. Pullar, P.E.

(Engineer's Name – Print or Type)

being a Registered Professional Engineer in accordance with the Pennsylvania Professional Engineer's Registration Law, do hereby certify to the best of my knowledge, information, and belief that the information contained in the accompanying application, plans, specifications, and reports has been prepared in accordance with accepted practice of engineering, are true and correct, and are in accordance with the Rules and Regulations of the Department of Environmental Protection. I also certify that those individuals indicated in the following paragraphs prepared this application under my supervision. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

Signature  Date 03/10/2018

License Number PE033923E Expiration Date 09/30/2019

Address EarthRes Group, Inc.
PO Box 468
Pipersville, PA 18947

Telephone No. (215) 766-1211



SECTION C. SOIL SCIENTIST PROVIDING SOILS INFORMATION

I, N/A do hereby certify
(Soil Scientists Name - Print or Type)

to the best of my knowledge, information, and belief that the soils information contained in this application has been prepared in accordance with accepted practices of soil science and in accordance with the Rules and Regulations of the Department of Environmental Protection. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

Signature _____ Date _____

Address _____

Telephone No. (____) _____

SECTION D. REGISTERED PROFESSIONAL GEOLOGIST

I, N/A being a
(Hydrogeologist's Name - Print or Type)

Registered Professional Geologist in accordance with the Pennsylvania Professional Geologists Registration Law, do hereby certify to the best of my knowledge, information, and belief that the hydrogeology information contained in this application has been prepared in accordance with the accepted practices of hydrogeology and in accordance with the Rules and Regulations of the Department of Environmental Protection. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment.

Signature _____ Date _____

License Number _____ Expiration Date _____

Address _____

Professional Seal

Telephone No. (____) _____

FORM B1
APPLICATION FORM CERTIFICATION



Date Prepared/Revised March 2018
DEP USE ONLY
Date Received

FORM B1 APPLICATION FORM CERTIFICATION

This form must be fully and accurately completed. All required information must be typed or legibly printed in the spaces provided. If additional space is necessary, identify each attached sheet as Form B1, reference the item number and identify the date prepared. The "date prepared/revised" on any attached sheets needs to match the "date prepared/revised" on this page.

SECTION A. SITE IDENTIFIER

Applicant/permittee: Slate Belt Heat Recovery Center, LLC

Site Name: Slate Belt Heat Recovery Center

Facility ID (as issued by DEP): _____

SECTION B. CERTIFICATION

Professional Engineer

I, Thomas G. Pullar, P.E.
(Engineer's Name -Print or Type)

being a Registered Professional Engineer in accordance with the Pennsylvania Professional Engineer's Registration Law, do hereby certify that the forms used in the accompanying application have been reproduced under my supervision and have the same exact content and the same format as the forms prepared by the Department. I am aware that there are significant penalties for altering the content of the Department's forms, including the possibility of fines and imprisonment.

Signature *Thomas G. Pullar*

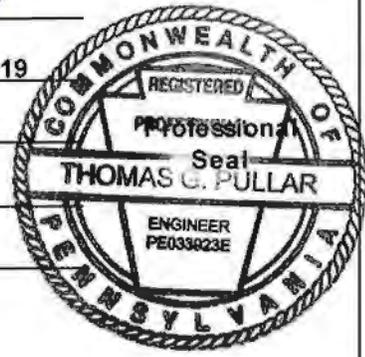
Date 03/20/2018

License Number PE033923E

Expiration Date 09/30/2019

Address EarthRes Group, Inc.
PO Box 468
Piperville, PA 18947

Telephone No. (215) 766-1211



FORM E-GP
CONTRACTUAL CONSENT OF LANDOWNER



Date Prepared/Revised March 2018
DEP USE ONLY
Date Received

FORM E-GP CONTRACTUAL CONSENT OF LANDOWNER FOR A GENERAL PERMIT

This form must be fully and accurately completed. All required information must be typed or legibly printed in the spaces provided. If additional space is necessary, identify each attached sheet as Form E-GP, reference the item number and identify the date prepared. The "date prepared/revised" on any attached sheets needs to match the "date prepared/revised" on this page.

General References: Parcel # E8 12 1A 0628

SECTION A. SITE IDENTIFIER

Applicant/permittee Slate Belt Heat Recovery Center, LLC

Site Name Slate Belt Heat Recovery Center

Facility ID (as issued by DEP) TBD

Instructions: This form should be completed by each landowner owning a parcel of land within the permit area. If an applicant is applying for a mobile processing permit or land application of waste, completion of Part A of this form is not required.

(I) (We), the undersigned, are the landowner(s) ("Landowner") of a fee title interest at Grand Central Sanitary Landfill, Inc.

910 W. Pennsylvania Avenue, Pen Arqyl, PA 18072 on 12.05 acres of land located in,
(location of premises)

Plainfield Township Northampton County
(Name and Type of Municipality) (Name of County)

Pennsylvania, and shown by crosshatched lines on the map attached hereto ("Premises") which is signed in the original by the Landowner upon which Slate Belt Heat Recovery Center, LLC
(Solid Waste Management Permit Applicant)
(hereinafter "Applicant") proposes to engage in waste processing and/or beneficial use activities.

Part A: This consent shall be deemed to be a recordable document. Prior to the initiation of solid waste management activities under the permit, this Consent shall be recorded by Slate Belt Heat Recovery Center, LLC
(Landowner or Applicant)

and entered into the deed book (d.b.v.) index at the office of the recorder of deeds in the county(ies) in which the Premises are located.

1. This instrument has been recorded in Northampton County
this _____ day _____, 20____, at Book _____, Page(s) _____.

Part B: (I) (We), the undersigned DO HEREBY ACKNOWLEDGE THAT THE APPLICANT AND HIS/HER AGENTS AND REPRESENTATIVES HAVE THE RIGHT TO ENTER UPON AND USE THE LAND FOR THE PURPOSES OF CONDUCTING WASTE MANAGEMENT ACTIVITIES for which application for permit, including this Consent, is made to the Department of Environmental Protection ("Department") under the Act of July 7, 1980 (P.L. 280, No. 97), as amended, known as the Solid Waste management Act (35 P.S. §§6018.101 et seq.) and the regulations promulgated pursuant thereto ("Act"). The right the Landowner grants is not the subject of pending civil litigation. (I) (We), the undersigned, (is or is not).

shall also allow the Applicant access to the Premises to carry out pollution prevention or pollution abatement activities as required by the Act or deemed necessary by the Department to carry out any purpose of the Act.

THE LANDOWNER agrees TO ALLOW THE ABOVE-NAMED APPLICANT TO TRANSFER OR
(agrees or does not agree)

ASSIGN, BY WRITTEN AGREEMENT, THIS CONTRACTUAL CONSENT TO ANOTHER SOLID WASTE MANAGEMENT FACILITY APPLICANT.

Nothing in this Consent shall preclude or limit the Landowner's authority to terminate the right or privilege of the Applicant to conduct waste management activities on the aforesaid Premises. In the event of such termination, the Landowner shall allow the Applicant ample time to bring to closure all waste management activities.

Part C: (I) (We), the undersigned, do hereby irrevocably grant to the Commonwealth of Pennsylvania or any of its authorized agents, or employees, and to the Applicant the right to enter upon the Premises for the duration of solid waste management activities and for up to ten (10) years after final closure, as such term is defined by the Act, of a processing facility or up to 20 _____ year(s) after beneficial use activities have ceased for the purposes of inspection, monitoring, and maintenance and for conducting pollution abatement activities deemed necessary by the Department to carry out the purposes or requirements of the Act. (I) (We) do hereby grant in addition to the Commonwealth, for the aforesaid period of time, a right of entry across any lands adjoining or contiguous to the Premises owned by (us) (me) in order to have access to the Premises.

It is specifically agreed and understood that this Consent gives the Commonwealth the right to enter, inspect, monitor, and conduct maintenance or abatement on the Premises to the extent deemed necessary by the Department as a matter within the police power, but does not obligate the Commonwealth to do so, and does not constitute any ownership interest by the Commonwealth in the aforesaid Premises.

I (we) HEREBY CERTIFY UNDER PENALTY OF LAW, 18 Pa. C.S. SECTION 4904(b), THAT THE INFORMATION PROVIDED HEREIN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF.

In witness whereof and intending to legally bind (myself) (ourselves), (my) (our) heirs, legal representatives, successors, (I) (we) have hereunto set (my) (our) hand(s) and seal this 19 day of March, 20 18.

Grand Central Sanitary Landfill, Inc.
(Print Name of Landowner)

If the Landowner is an Individual:

WITNESS:

(Signature of Witness)

(Signature of Landowner)

(Printed or Typed Name of Witness)

(Printed or Typed Name of Landowner)

(Signature of Witness)

(Signature of Landowner)

(Printed or Typed Name of Witness)

(Printed or Typed Name of Landowner)

If the Landowner is a Corporation:

ATTEST:

By: [Signature]
(Signature of Secretary or Treasurer)

[Signature]
(Signature of President or V.P.)

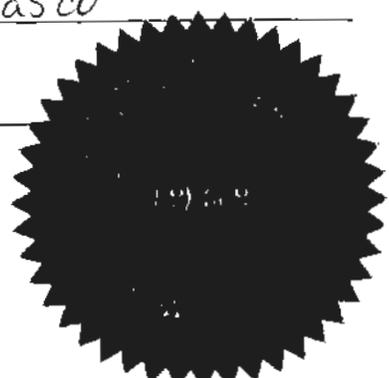
Thomas E Utermark
(Printed or Typed Name)

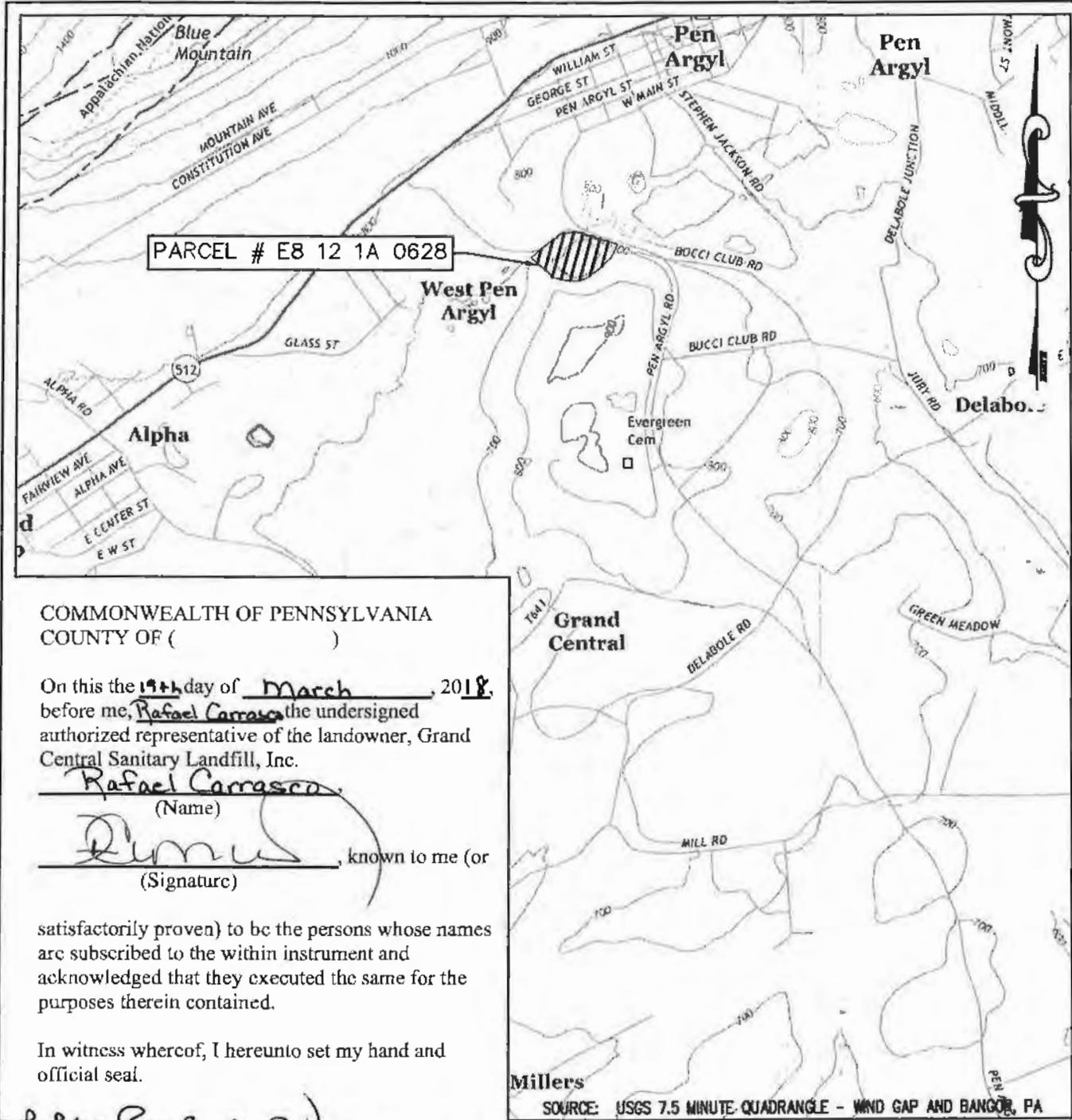
Rafael Carrasco
(Printed or Typed Name)

Assistant Secretary + Vice President
(Title)

President
(Title)

Affix Corporate Seal:





COMMONWEALTH OF PENNSYLVANIA
 COUNTY OF ()

On this the 14th day of March, 2018,
 before me, Rafael Carrasco the undersigned
 authorized representative of the landowner, Grand
 Central Sanitary Landfill, Inc.

Rafael Carrasco
 (Name)

[Signature], known to me (or
 (Signature)

satisfactorily proven) to be the persons whose names
 are subscribed to the within instrument and
 acknowledged that they executed the same for the
 purposes therein contained.

In witness whereof, I hereunto set my hand and
 official seal.

[Signature]
 Notary Public

(NOTARY SEAL)

COMMONWEALTH OF PENNSYLVANIA
 NOTARIAL SEAL
 Charles Raudenbush Jr, Notary Public
 Lower Southampton Twp., Bucks County
 My Commission Expires May 28, 2019

LEGEND

- SCHOOL
- FIRE STATION
- CEMETERY
- POLICE OFFICE



P.O. Box 468
 6912 Old Eastern Road
 Pipersville, PA 19847 USA
 1221C Pineside Drive
 Morgantown, WV 25505
 www.earthres.com

PA office 215.766.1211
 WV office 304.212.6866
 toll free 800.264.4553

DRAWN BY: <u>CJS</u>	CHECKED BY: <u>TGP</u>
DATE: <u>02/27/18</u>	PROJECT NO: <u>151014.004</u>
DRAWING SCALE: <u>1" = 2000'</u>	

FIGURE E-1
 SITE LOCATION MAP

SLATE BELT HEAT RECOVERY CENTER, LLC
 PLAINFIELD TOWNSHIP, NORTHAMPTON COUNTY
 PENNSYLVANIA

**FORM HW-C
COMPLIANCE HISTORY**



FORM HW-C COMPLIANCE HISTORY

Fully and accurately provide the following information, as specified. Attach additional sheets as necessary.

Type of Form HW-C Submittal (check all that apply):

Original Filing Amended Filing Date of Last Filing _____

Type of Permit or License Submittal:

New Application Renewal Annual Update Other _____
(specify)

A. General Applicant Information:

1. NAME OF PERMIT OR LICENSE APPLICANT/PERMITTEE/LICENSEE ("applicant")
(non-corporations attach documentation of legal name):

Slate Belt Heat Recovery Center, LLC

ADDRESS: 435 Williams Court

Suite 100

Baltimore, MD 21220-2888

TELEPHONE NUMBER: (443) 489-9069

TAXPAYER ID#: 45-4824177

PERMIT, LICENSE OR APPLICATION ID#: _____

2. Identify the form of management under which the applicant conducts its business (check appropriate box) and describe the type(s) of business activities performed:

- | | |
|--|---|
| <input type="checkbox"/> Individual | <input type="checkbox"/> Fictitious Name |
| <input type="checkbox"/> Municipality | <input type="checkbox"/> Partnership |
| <input type="checkbox"/> Proprietorship | <input type="checkbox"/> Limited Partnership |
| <input type="checkbox"/> Public Corporation | <input type="checkbox"/> Government Agency |
| <input type="checkbox"/> Private Corporation | <input type="checkbox"/> Joint Venture |
| <input type="checkbox"/> Syndicate | <input type="checkbox"/> Association |
| <input type="checkbox"/> Municipal Authority | <input checked="" type="checkbox"/> Other Type of Business <u>LLC</u> |
- (specify)

3. Type of permit, license or application (check all that apply):

- Hazardous Waste Permit
 - Hazardous Waste Transporter License
 - Municipal Waste Permit
 - Regulated Medical, Chemotherapeutic Waste Transporter License
 - Residual Waste Permit
 - Other _____
- (specify)

FORM HW-C

B. General Information Regarding "Related Parties"

1. **Applicants which are a corporation or a division of a corporation**, provide the following information:
 - a. The principal shareholders or stockholders who own, hold, or control stock of five percent (5%) or more of a publicly held corporation or ten percent (10%) or more of a privately held corporation.

N/A
 - b. State the names, principal places of business and taxpayer ID numbers of all domestic and foreign parent corporations (including ultimate parent corporations), and all domestic and foreign subsidiary corporations of the applicant, as well as the subsidiary corporations of the ultimate parent corporation. Include unincorporated divisions and private corporations. A diagram of corporate structure may be provided to illustrate corporate relationships.

N/A
 - c. List all principals of the corporation that have also been principals of other corporations which have committed any violation of the Environmental Protection Acts. (See Instructions, Items 2 and 6.)

N/A
2. Provide the names and addresses of all principals, corporate officers, general and limited partners, directors, other persons performing a function similar to a director, and other persons or related parties of the applicant (see Instructions, Items 4 and 5). The relationship to the applicant must be clearly described.

**Benjamin Smith – Vice President and Treasurer;
Michael Schwartz – Vice President;
Alan Slepian – Secretary;
Matthew DeWitt – Assistant Secretary**

The following address can be used for all listed above:

**435 Williams Court
Suite 100
Baltimore, MD 21220**

3. Provide the names and addresses, or IRS tax identification numbers¹ and affiliation of other persons or related parties having or exercising control over any aspect of the proposed facility or activity that is regulated by the Department, including but not limited to, associates, agents, contractors, subcontractors, and property owners.

**Synagro-WWT, Inc.
435 Williams Court
Suite 100
Baltimore, MD 21220
*Tax ID 52-1130492**

4. Provide the names and addresses of all owners of record of surface and subsurface areas within and contiguous to the proposed permit area. (Not applicable to transporter license applicants.)

**Grand Central Sanitary Landfill, Inc.
910 W. Pennsylvania Avenue
Pen Argyl, PA 18072**

¹ Failure to provide all applicable numbers may delay processing of the application.

FORM HW-C

5. Provide the names and addresses of all holders of record to a leasehold interest of surface and subsurface areas within and contiguous to the proposed permit area.

**Lease in Synagro Technologies, Inc.
435 Williams Court
Suite 100
Baltimore, MD 21220**

6. If the applicant, or other related party to the applicant, has a beneficial interest in, or otherwise manages or controls any other person, municipality or other related party (as described in Sections A and B) engaged in the business of solid waste collection, transportation, storage, processing, treatment, or disposal, provide the following information:

- a. The name, address and tax identification number or employer identification number of the corporation, other person, municipality, or other entity, in which the applicant or other related party has a beneficial interest, manages, or controls as described above.

N/A

- b. The nature of the relationship or participation with the corporation, other person, municipality, or other related party.

N/A

C. Specific information Regarding the Applicant and Its Related Parties

1. List the name and location of all of the **applicant's and related party's places of business and terminals** where municipal, residual and/or hazardous waste activities are conducted. Such activities include, but are not limited to generation, processing, collection, transportation and storage, treatment or disposal of solid waste, except that locations that generate only municipal waste need not be listed.

See attachment A.

Biosolid services are provided up to 600 customers, and within 38 different states.

2. List all **permits or licenses issued** by the Department or any other state or federal agency under the Environmental Protection Acts to the applicant or any other persons or related parties identified in Sections A or B, that are currently in effect or have been in effect at any time in the ten years previous to the date on which this form is notarized. This list is to include the type of permit or license, permit or license number, location, address, issuance date and expiration date.

NMOP renewal is confirmed to be administratively complete and will be processed for technical review as of 07/12/17. Anticipated to receive renewal in first quarter of 2018.

FORM HW-C

Air Contamination Source	Plan Approval / Operating Permits	Location	Issuance Date	Expiration Date
Philadelphia Renewable Biofuels, LLC (two Drying Trains and an Odor Control Scrubber)	Natural Minor Operating Permit No. N12-031	7800 Penrose Ferry Road Philadelphia, PA 19153	October 16, 2012	October 16, 2017

3. List all **permit or license denials** issued by the Department or any other state or federal agency under the Environmental Protection Acts to the applicant or any other person or related party identified in Section A or B, within ten years previous to the date on which this form is notarized. Include the type of permit or license, permit or license number, location, denial date and reason for denial.

None

4. List all persons or related parties identified in Sections A or B which have filed for or been discharged from **bankruptcy** within 10 years previous to the date on which this form is notarized. Specify the circumstances of bankruptcy including those for which the debtor sought to abandon property or to be discharged from any environmental liability subject to the Environmental Protection Acts. Include the name of the bankruptcy court, docket number and description and location of any property involved.

Synagro-WWT, Inc and the applicant were part of the prepackaged 90 day bankruptcy reorganization in 2013 to affect the sale of the companies to a new owner. Neither sought to abandon property or responsibilities associated with environmental concerns. All trade creditors were fully paid as a result of the reorganization.

D. Compliance Background:

(Note: Copies of specific documents must be made available to the Department upon its request)

Compliance History:

List all "**Enforcement Actions**" issued by the Department or any other state or federal or county agency to the applicant or those persons or related parties identified anywhere in response to Sections A, B or C using the following format grouped by state and location in chronological order.

Date	Location	Permit/ License/ EPA ID #	Issuing Agency	Type of Action	Nature of Violation	Disposition	Dollar Amount of Penalty
------	----------	---------------------------------	-------------------	----------------------	------------------------	-------------	--------------------------------

Enforcement actions include but are not limited to:

FORM HW-C

All **notices of violation (NOVs)**, issued by any regulatory agency to the applicant or those persons or related parties identified anywhere in Sections A, B or C concerning the Environmental Protection Acts, or any other environmental statute, regulation or ordinance.

All **administrative orders, civil penalties, permit or license suspensions/revocations, bond forfeiture actions, and civil penalty actions** adjudicated by any judicial body against the applicant or those persons or related parties identified anywhere in Sections A, B or C concerning the Environmental Protection Acts, or a regulation or order or a condition of a permit or license.

All **consent orders, consent adjudications, consent decrees or monetary settlements (settlement agreements, letter agreements, settlement letters or consent assessments)** between the applicant or those persons or related parties identified anywhere in Sections A, B or C and any state, federal or county agency regarding the Environmental Protection Acts, or any other environmental statute, regulations or ordinance.

All **court proceedings** in which those persons or related parties identified anywhere in Sections A, B or C have been involved in relation to the Environmental Protection Acts.

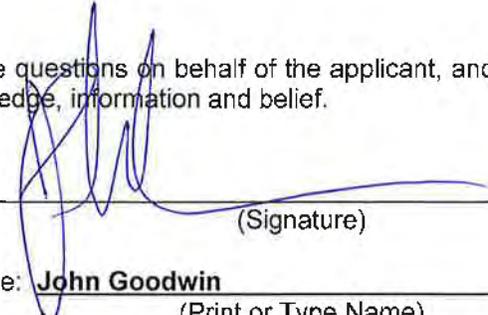
All **summary, misdemeanor, or felony convictions, or pleas of guilty or no contest** that have been obtained against the applicant or those persons or related parties identified anywhere in Sections A, B or C, pursuant to the Environmental Protection Acts, or for any acts involving the generation, storage, treatment, transportation, processing, or disposal of municipal, residual or hazardous waste.

For all persons and municipalities identified in Section A, B or C, indicate all violations committed and any subsequent enforcement actions taken regarding the facility or activity not previously listed in this section, concerning the Environmental Protection Acts.

State the reasons for suspension, revocation, or denial of any permit/permit application or license/license application filed by the applicant or any related party concerning the Environmental Protection Acts. Provide the date, location and nature of the violations, type of action, issuing agency, dollar amount of any monetary penalty associated with the action and permit, license, EPA ID# or other identifying number if applicable.

FORM HW-C

I hereby certify that I have the authority to respond to the above questions on behalf of the applicant, and that the information provided herein is true and correct to the best of my knowledge, information and belief.



(Signature)

Name: John Goodwin

(Print or Type Name)

Title: Vice President - Engineering

(Print or Type Title)

Sworn to and subscribed before me this

13th day of March,

2018.



Notary Public

Constance A. Reynolds
Notary Public
Anne Arundel County, Maryland
My Commission Expires
September 28, 2018

(Signature)

Name: _____
(Print or Type Name)

Title: _____
(Print or Type Title)

Sworn to and subscribed before me this

_____ day of _____,

20____.

Notary Public

Attach copy
of Articles of Incorporation

(For Corporations, see the Instructions, Item 9, regarding signatures and submission of Articles of Incorporation.)

Attachment A
Section C.1 (Name and Location of Places of Business)

Headquarters

- Synagro HQ
435 Williams Court, Suite 100
Baltimore, MD 21220
-

Alabama

- Synagro Decatur
501 Woodall Road
Decatur, AL 35601
-

Arizona

- Arizona Soils Compost Facility
41326 McVay Road
Vicksburg, AZ 85348
-

California

- Synagro/Nursery Products
14479 Cougar Road
Helendale, CA 92342
 - Synagro Rancho Cordova
3110 Gold Canal Drive, Suite E
Rancho Cordova, CA 95670
 - Central Valley Compost Facility
13757 South Harmon Road
El Nido, CA 95317
 - Sacramento Pelletizer
8600 Laguna Station Road
Elk Grove, CA 95758
 - South Kern Compost Manufacturing Facility
2653 Santiago Road
Taft, CA 93268
-

Connecticut

- Synagro New Haven
345 East Shore Parkway
New Haven, CT 06512
- Synagro Stamford
1 Harbor View Avenue, Building 15
Stamford, CT 06902
- Synagro Watertown
680 Main Street, Suite 303
Watertown, CT 06795
- Waterbury Wastewater Treatment Facility
199 Municipal Road
Waterbury, CT 06708

Florida

- Synagro Miami
9100 S. Dadeland Blvd, Suite 1500
Miami, FL 33156
 - Synagro Ft. Pierce
2200 North Kings Highway
Fort Pierce, FL 34951
 - Synagro Pinellas
5900 74th Street North
St. Petersburg, FL 33709
 - Charlotte County Bio-Recycling Center
29751 Zemel Road
Punta Gorda, FL 33955
 - Organic Product Marketing Group
1486 North Wilson Avenue
Bartow, FL 33830
-

Hawaii

- Sand Island Wastewater Treatment Plant
1350 Sand Island Parkway
Honolulu, HI 96819
-

Illinois

- Synagro Elgin
1230 Larkin Avenue
Elgin, IL 60123
 - Synagro Rockdale
2126 Gould Court
Rockdale, IL 60436
-

Maryland

- Synagro Hagerstown
1030 Frederick Street
Hagerstown, MD 21740
 - Synagro Whiteford
1605 Dooley Road
Whiteford, MD 21160
 - Baltimore – Back River Pelletech Facility
8201 Eastern Avenue
Baltimore, MD 21224
 - Baltimore Patapsco Pelletizer
3501 Asiatic Avenue
Baltimore, MD 21226
-

Michigan

- Synagro Grandville
2350 Ivanrest Avenue
Grandville, MI 49418
- Synagro Saginaw
3050 Freeway Lane
Saginaw, MI 48601

New Jersey

- Synagro Camden
1645 Ferry Avenue
Camden, NJ 08104
 - EPIC Rail
227 Route 206
Flanders, NJ 07836
 - EPIC Rail Facility
319 Avenue P
Newark, NJ 07105
-

North Carolina

- Synagro Mocksville
284 Boger Road
Mocksville, NC 27028
 - Synagro Pineville
12701 Lancaster Highway
Pineville, NC 28134
-

Ohio

- Synagro Amsterdam
11524 State Route #43E
Amsterdam, OH 43903
 - Synagro Lancaster
818 Lawrence Street
Lancaster, OH 43130
 - Synagro Miamisburg
4515 Infirmary Road
Miamisburg, OH 45342
-

Pennsylvania

- Synagro/Hypex
451 N. Cannon Avenue
Lansdale, PA 19446

- Pen Argyl-Slate Belt Heat Recovery Center
Plainfield Township, Northampton County
Bangor, PA
 - Philadelphia Biosolids Recycling Facility
7800 Penrose Ferry Road
Philadelphia, PA 19153
-

Rhode Island

- Synagro Woonsocket
15 Cumberland Hill Road
Woonsocket, RI 02895
-

Virginia

- Synagro Champlain
10647 Tidewater Trail
Champlain, VA 22438
-

Wisconsin

- Synagro Wasau
5300 Stewart Avenue, Suite 400D
Wausau, WI 54401

Synagro Enforcement Action - 3 Year Summary

Date	State	Location	Synagro Entity Charged	Permit/License/Registration #	Issuing Agency	Type of Action	Nature of Violation	Alleged Violation	Disposition	\$ Amt. of Penalty
01/31/18	PA	Ott Farm, Lower Bethel Twp, Northampton County	Synagro	Lehigh County Authority General Permit WMGR099	PADEP	NOV	Application on frozen ground	Spreading on frozen ground on 1/26/18	NOV	
01/09/18	PA	Ken Moore Farm #2, Fawn Twp, York Co. PA	Synagro		PADEP	NOV	Soil pH adjustment deficiency	Biosolids land applied to fields with soil pH below 6.0 without written approval of Department	NOV	
07/21/17	OH	Columbus, OH	Synagro		OEPA	NOV	Spill	Overturned tanker of Class B biosolids spilled approximately 2,500 gallons into 4 wetlands that leads to Hellbranch Run (Waters of the State)	NOV	
06/30/17	CA	Silva Ranch I, Sacramento County	Synagro West, LLC	WDR Order 93-064; MRP R5-2007-0807	Central Valley Regional Water Quality Control Board	NOV	Overapplication	Overapplication on fields in August and September 2016	NOV	
06/30/17	CA	Silva Ranch II, Sacramento County	Synagro West, LLC	WDR Order 98-023; MRP R5-2007-0807	Central Valley Regional Water Quality Control Board	NOV	Overapplication	Overapplication to field 77 in September 2016	NOV	
05/03/17	CA	SOJECCO	Synagro Organic Fertilizer Co. (SORCO)		Sacramento County Env. Management Dept.	Notice to Comply	Hazardous Waste Management	3 observed violations: 1) Used oil and water was observed in the containment pallet in the hazardous waste storage area; 2) facility has not submitted the Hazardous Materials Inventory Chemical Description page to DDuster to department; 3) the Owner/Operator Identification page submitted is outdated and personnel has changed	Notice to Comply issued	
01/19/17	CA	Silva Ranch I, Sacramento County	Synagro West, LLC	WDR Order 95-064; MRP R5-2007-0807	Central Valley Regional Water Quality Control Board	NOV	Application of unauthorized material	Green waste applied to biosolids land application areas. Observed during 12/29/16 inspection	NOV	
12/29/16	CA	Taft, CA	South Kern Industrial Center, LLC	S-4212-2-6	San Joaquin Valley Unified Air Pollution Control District	NOV	Emissions Testing	Violation of air emissions limitations during August 2016 source test	NOV	\$2,580
11/09/16	CA	Silva Ranch I, Sacramento County	Synagro West, LLC	WDR Order 95-064; MRP R5-2007-0807	Central Valley Regional Water Quality Control Board	NOV	Application of unauthorized material	Green waste applied to biosolids land application areas. Additional revisions made in 1/18/17 letter that revised NOV and resubmitted 11/9 Silva Ranch 2 NOV	NOV	
11/08/16	OH	Field 04-LCT-3-4	Synagro	NPDES 2PF00000*MD	OEPA	NOV	Buffer Zone/ Signage	Application of biosolids within 300 foot buffer from occupied building, 300 feet from private potable water source and 33 feet from surface waters of the US. Additionally, appropriate signage along road frontages not in place.	NOV	
09/01/16	CA	Field CA-SO-21-12, McCormack Ranch, Solano County, CA	Synagro West, LLC		Solano County Division of Environmental Health	NOV	Drag out	Biosolids observed on McClokey Rd., tracked from field	NOV	
07/25/16	CT	New Haven, CT	Synagro Northeast, LLC		US EPA	NOV	Clean Air Act violation	Failure to complete actions specified in 40 CFR Part 62, Subpart LLL prior to compliance date of 3/2/16. No notice provided within 10 days of compliance date of failure to comply, and monthly reports not submitted.	NOV	
07/25/16	RI	Woonsocket, RI	Synagro Northeast, LLC		US EPA	NOV	Clean Air Act violation	Failure to complete actions specified in 40 CFR Part 62, Subpart LLL prior to compliance date of 3/2/16. No notice provided within 10 days of compliance date of failure to comply, and monthly reports not submitted.	NOV	
06/09/16	CT	Waterbury, CT	Synagro Northeast, LLC		US EPA	NOV	Clean Air Act violation	Failure to complete actions specified in 40 CFR Part 62, Subpart LLL prior to compliance date of 3/2/16. No notice provided within 10 days of compliance date of failure to comply, and monthly reports not submitted.	NOV	Current Default Civil Penalty - \$52000
05/10/16	CA	Taft, CA	South Kern Industrial Center, LLC		Central Valley Regional Water Quality Control Board	NOV	WDR violations	1) Feedstock stored in unlined areas; 2) Feedstock stored on paved roadway from feedstock storage area to Primary ASPs; 3) Compost piles stored on unlined areas as well as paved roads between primary and secondary ASPs; 4) Material from conveyor belt loading from Mix Building to feedstock area falling on unlined areas; 5) Cracks noted in concrete and asphalt liners and potholes on paved roadways	NOV	
03/31/16	PA	Kofter II Farm field K6-B, Lower Mount Bethel Twp, Northampton County	Synagro		PA DEP	NOV	Overapplication	Application of manure to site after biosolids application in 2015, resulting in exceedance of agronomic rate for 2.5 acres of field.	NOV	
11/20/15	MD	Jon Bassler Property, Carroll County, MD	Synagro Central, LLC	SSI Permit No. 2012-SAG-4845	MDE	NOV	Overapplication	Overapplication to site CA-24, fields 4, 5, 7 and 9	NOV	\$1,250.00
10/07/15	RI	Woonsocket, RI	Synagro Woonsocket, Inc.		RI Board of Certification of Operators of Wastewater Treatment Facilities	NOV	Operator Certification	Operator did not obtain required wastewater operator certification within one year of employment	NOV	

FORM L
CONTINGENCY PLAN FOR EMERGENCY PROCEDURES



Date Prepared/Revised March 2018
DEP USE ONLY
Date Received

FORM L

CONTINGENCY PLAN FOR EMERGENCY PROCEDURES

This form must be fully and accurately completed. All required information must be typed or legibly printed in the spaces provided. If additional space is necessary, identify each attached sheet as Form L, reference the item number and identify the date prepared. The "date prepared/revised" on any attached sheets needs to match the "date prepared/revised" on this page.

General References: 273.181; 277.181; 279.109; 281.141; 283.110; 288.171; 289.163; 293.109; 295.141; 297.111; 299.216

SECTION A. SITE IDENTIFIER

Applicant/permittee: Slate Belt Heat Recovery Center, LLC

Site Name: Slate Belt Heat Recovery Center

Facility ID (as issued by DEP): TBD

SECTION B. CHECK TYPE OF FACILITY

Municipal Waste Landfill.....	<input type="checkbox"/>	Residual Waste Disposal Impoundment.....	<input type="checkbox"/>
Construction/Demolition Waste Landfill	<input type="checkbox"/>	Residual Waste Composting Facility.....	<input type="checkbox"/>
Composting Facility	<input type="checkbox"/>	Land Application of Residual Wastes.....	<input type="checkbox"/>
Demonstration Facility	<input type="checkbox"/>	Residual Waste Demonstration Facility	<input type="checkbox"/>
Transfer Facility	<input type="checkbox"/>	Residual Waste Transfer Facility	<input type="checkbox"/>
Incinerator or Resource Recovery Facility	<input type="checkbox"/>	Residual Waste Incinerator	<input type="checkbox"/>
Other Waste Processing Facility	<input checked="" type="checkbox"/>	Oil and Gas Wastewater Storage Impoundment	<input type="checkbox"/>
Residual Waste Landfill.....	<input type="checkbox"/>	Other Residual Waste Processing Facility	<input type="checkbox"/>

SECTION C. CONTINGENCY PLAN (See Attached Contingency Plan)

A contingency plan, relating to emergency procedures, must be developed and implemented for the proposed waste management facility. The plan must include a Preparedness, Prevention and Contingency Plan (PPC Plan) that is consistent with the Department's most recent guidelines, #400-2200-001, titled, Development and Implementation of Environmental Emergency Response Plans (<http://www.dep.state.pa.us/dep/deputate/airwaste/wm/mrw/forms/master-forms.htm>). The format is that of the PPC Plan guidelines. In addition, the contingency plan must contain provisions that require routine drills and equipment tests targeted at preventing hazards at the facility. These additional provisions should appear at various locations in the PPC Plan Guidelines, as follows:

1. In addition to the requirements of Section II-C (Spill Leak Prevention and Response) of the PPC Plan guidelines, describe how the proposed facility will be designed, constructed, maintained, and operated to prevent and minimize potential for fire, explosion or release of solid waste constituents to the air, water or land. As part of this Section, include but do not limit information to site maps, product storage areas, transfer areas, process/handling areas, truck and railcar loading and unloading areas, and waste handling and storage areas. It will also be necessary to address the trucking of leachate, whether permanent or temporary, in this Section of the PPC Plan.
2. For municipal and residual waste landfill, construction/demolition waste landfill, and residual waste disposal impoundment applications:
 - a) In addition to the requirements of Section II-D.5 (Emergency Equipment Available for Response) of the PPC Plan guidelines, indicate the available first aid facilities, their location(s) at the facility, and procedures for their proper management and maintenance.
3. For resource recovery facility and other municipal or residual waste processing facility applications:
 - a) In addition to the requirements of Section II-C.8 (Employee Training Program) of the PPC Plan Guidelines, describe the development of an Accident Prevention and Safety Plan to protect employees and patrons of the facility. The Accident Prevention and Safety Plan must include:

SECTION C. (Continued) (See Attached Contingency Plan)

- i) The development of an employee safety handbook, to be issued to each employee
 - ii) Special operating procedures for potentially dangerous activities, which will be posted in relevant operating areas
 - iii) A schedule of ongoing safety programs that must be conducted, as required
 - iv) Emergency telephone numbers and basic procedures for first aid which will be posted throughout the facility
- b) In Section II-A.2 (Emergency Response Plans) of the PPC Plan Guidelines, explain State and Federal laws pertaining to occupational safety and their implementation, as well as the implementation of operation, safety and maintenance procedures recommended by the designers or manufacturers of equipment at the facility.
- c) In Section II-C.4 (Preventive Maintenance) of the PPC Plan Guidelines, explain how proper ventilation of the facility will be conducted. Further, describe how open burning will be prevented.
4. Provide an up-to-date list of all available emergency equipment. The list must include the location, a physical description, maintenance and testing schedule, and a brief description of the intended use and capabilities of each item on the list. In addition, for each of the types of equipment identified below, check a box to indicate whether it will be available for use during an emergency, and include specific information in the respective section of the PPC Plan. If you check "Available," identify the specific equipment which will be used. If you check "Not Available," explain in detail why such equipment is not necessary to protect public health, safety, public welfare, and the environment during an emergency:

Available	Not Available	
-----------	---------------	--



- | | | |
|--|--|--|
| | | a. Internal Communication or Alarm System
(incorporate into <u>Section II-D.3</u> (Internal and External Communication and Alarm System) of PPC Plan) |
|--|--|--|



- | | | |
|--|--|--|
| | | b. Communication system capable of summoning emergency assistance.
(incorporate into <u>Section II-D.3</u> of PPC Plan) |
|--|--|--|



- | | | |
|--|--|---|
| | | c. Portable Fire Extinguishers
(incorporate into <u>Section II-D.5</u> (Emergency Equipment Available for Response) of PPC Plan) |
|--|--|---|



- | | | |
|--|--|--|
| | | d-1. Fire Control Equipment for Landfill
(incorporate into <u>Section II-D.5</u> of PPC Plan) |
|--|--|--|



- | | | |
|--|--|--|
| | | d-2. Fire Control Equipment for Resource Recovery Facility, Transfer Station, and Composting Facility – describe the facility water supply, and quantity and pressure of water needed to supply equipment.
(incorporate into <u>Section II-D.5</u> of PPC Plan) |
|--|--|--|



- | | | |
|--|--|---|
| | | e. Spill Control Equipment
(incorporate into <u>Sections II-E</u> (Emergency Control Network); <u>II-C.3</u> (Inspection and Monitoring Program); <u>II-C.4</u> (Preventive Maintenance); and <u>II-C.5</u> (Housekeeping Program); and <u>II-D.5</u> of PPC Plan) |
|--|--|---|



- | | | |
|--|--|--|
| | | f. Decontamination Equipment
(incorporate into <u>Section II-D.5</u> of PPC Plan) |
|--|--|--|



- | | | |
|--|--|---|
| | | g. Portable Gas Explosimeters
(incorporate into <u>Section II-D.5</u> of PPC Plan) |
|--|--|---|



- | | | |
|--|--|---|
| | | h. Other Gas Monitoring Equipment
(incorporate into <u>Section II-D.5</u> of PPC Plan) |
|--|--|---|

5. In addition to the requirements of Section II-B.3 (Duties and Responsibilities of the Coordinator) of the PPC Plan guidelines, describe how adequate space will be maintained to allow the unobstructed movement of emergency personnel and equipment to any operating area of the facility. Explain what measures will be taken to provide emergency agencies with the specific PPC Plan for the facility, as well as if the facility will continue to operate in the event of an emergency.

SECTION D. IMPLEMENTATION OF THE CONTINGENCY PLAN (See Attached Contingency Plan)

The operator of the facility shall immediately implement the applicable provisions of the approved contingency plan in the event of an emergency. The term "emergency" includes a fire, spill or other event that threatens public health, safety, public welfare, or the environment, and personal injury.

In addition to the requirements of Section II-B.3 and Appendix I (Examples of an Emergency Coordinator's Duties and Responsibilities) of the PPC Plan guidelines, explain the duties and responsibilities of the emergency coordinator of the facility, using the following as guidance.

In the event of an emergency, the operator shall:

1. Make an assessment of actual or potential hazards to public health and safety, public welfare and the environment, that are occurring or may occur.
2. Ensure that fires, spills or other hazards do not occur, reoccur or spread to other solid waste at the facility.
3. Immediately phone the local and/or county and the Department's emergency management agency, and report the following:
 - a. name and phone number of person reporting the incident;
 - b. name, address, and permit number of the facility;
 - c. date, time and location of emergency;
 - d. description of the nature of the emergency;
 - e. type and quantity of solid waste involved;
 - f. existence of dangers to public health, safety, public welfare, and the environment;
 - g. nature of injuries; and
 - h. parts of the contingency plan being implemented to alleviate the emergency.
4. After an emergency, the operator shall:
 - a. clean up the affected area;
 - b. treat, store or dispose of recovered solid waste, contaminated soil or contaminated waste in a manner approved by the Department. Testing of the affected area may be necessary to assure that spilled contaminants have been removed adequately; and
 - c. prevent disposal, processing, storage or treatment of solid waste in the area affected by the emergency until the operator has cleaned up the area, and the Department has inspected and approved the cleanup.



**Slate Belt Heat Recovery Center, LLC
435 Williams Court, Suite 100
Baltimore, MD 21220**

**CONTINGENCY PLAN FOR EMERGENCY
PROCEDURES**

**Slate Belt Heat Recovery Center
Plainfield Township
Northampton County, PA**

March 2018

Prepared By:



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Immediately following report

FIGURES

- Figure 1 Site Location Map
- Figure 2 Facility Plan
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APPENDICES

- Appendix A Substantial Harm Criteria Certification
- Appendix B PPC and SPCC Cross-Reference
- Appendix C Aboveground Storage Tanks Maintenance/Operation Monthly Checklist
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- Appendix E Directions to Emergency Medical Facilities
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INTRODUCTION

This Contingency Plan, hereinafter referred to as the “Plan”, has been developed to prevent the release of toxic, hazardous, or other pollutants to the environment from the Slate Belt Heat Recovery Center, LLC – Slate Belt Heat Recovery Center (SBHRC). The Plan is to be used as a training tool and as a strategy for response to actual emergencies. In developing the Plan, the SBHRC has put emphasis on preventing accidental discharges.

To ensure that all necessary measures are in place to prevent the release of toxic, hazardous, or other pollutants, this contingency plan is comprised of a complete Preparedness, Prevention, and Contingency Plan (PPC). The included PPC plan complies with the Pennsylvania Department of Environmental Protection’s (PADEP’s) most recent guidelines for PPCs as described in the section below.

Preparedness, Prevention, and Contingency Plan

The Preparedness, Prevention, and Contingency (PPC) Plan addresses the requirements of the following state and federal pollution incident prevention and emergency response programs:

- Pennsylvania Solid Waste Management Act (25 Pa. Code Ch. 262a, 264a, 265a, 266a, 273, 277, 279, 281, 283, 287, 288, 289, 293, 295, 297)
- Pennsylvania Clean Streams Law (25 Pa. Code Ch. 78, 91.34)
- Pennsylvania Storage Tank and Spill Prevention Act (Act 32-1989, 25 Pa. Code Ch. 245)
- Federal Clean Water Act and Oil Pollution Act (40 CFR 110, 112, 125)

The purpose of the PPC Plan is to minimize and abate hazards to human health and the environment from fires, explosions, or release of hazardous wastes to air, soil, or surface water. The PPC Plan was prepared following the Pennsylvania Department of Environmental Protection (PADEP) “Guidelines for the Development and Implementation of Environmental Emergency Response Plans”, revised August 2005.

The PPC Plan must be periodically reviewed and updated, if necessary. As a minimum this must occur when:

- Applicable Department regulations are revised;
- The PPC Plan fails in an emergency;
- The Facility changes in its design, construction, operation, maintenance, or other circumstances, in a manner that materially increases the potential for fires, explosions or releases of toxic or hazardous constituents; or which changes the response necessary in an emergency;
- The list of emergency coordinators changes;
- The list of emergency equipment changes;
- Upon removal or addition of a storage tank(s).

Spill Prevention Control and Countermeasure Plan

A Spill Prevention Control and Countermeasure (SPCC) Plan is also required at the Facility due to combined capacity of aboveground oil storage of more than 1,320 gallons of oil, and if due to its location, the Facility could reasonably be expected to discharge into or upon the navigable waters of the United States. This document has been created to maintain compliance with 40 CFR Part 112 – Oil Pollution Prevention. The SPCC Plan addresses storage tanks, drum storage areas, piping and equipment that are used for oil. The Substantial Harm Criteria Certification is provided in **Appendix A**. The SPCC Plan requirements are addressed within the PPC Plan as indicated in the cross-reference table located in **Appendix B**.

The elements of this SPCC Plan should be updated when any of the following occur:

- A change in the Facility design, construction, operation and maintenance occurs that materially affects the potential for discharge.
- Changes in Site conditions occur that materially affect the content of the SPCC Plan.
- A reportable spill or release occurs.
 - The Facility discharges in a single event more than 1,000 gallons of oil into or upon navigable waters of the U.S.
 - The Facility discharges oil in harmful quantities in two spill events (over 42 gallons) within any twelve-month period.
- Sources covered under the SPCC Plan are added or deleted.

The SPCC Plan must be submitted to the U.S. EPA Region 3 Regional Administrator within sixty (60) days and to the state agency, along with the other information specified in 40 CFR Part 112.4, if either of the following occurs:

- The Facility discharges in a single event more than 1,000 gallons of oil into or upon navigable waters of the U.S.
- The Facility discharges oil in harmful quantities in two spill events (over 42 gallons) within any twelve-month period.

Changes should be made to the SPCC Plan within six (6) months of those changes taking place. Following any technical changes, the SPCC must be reviewed and approved by a registered Professional Engineer (PE). A PE certification is not required for non-technical changes to the SPCC Plan portion of this Plan.

Spill Prevention Response Plan

A Spill Prevention Response (SPR) Plan is required by the Pennsylvania Storage Tank and Spill Prevention Act for all facilities with more than 21,000 gallons of aboveground storage of regulated substances. The Slate Belt Heat Recovery Center has less than 21,000 gallons stored in regulated tanks at this Site; therefore, the SPR provisions do not apply.

DESCRIPTION OF FACILITY

1.1 Description of the Industrial Activity

Slate Belt Heat Recovery Center, LLC proposes to permit and construct the Slate Belt Heat Recovery Center (SBHRC), hereinafter referred to as the “Site” or “Facility”, a biosolids processing facility, contained within a 12.05 acre parcel of land (tax parcel no. E8-12-1 and E8-12-1A will be adjusted to create the 12.05 acre lot) owned by Grand Central Sanitary Landfill (GCSL) and situated near Green Knight Economic Development Corporation (GKEDC) facilities at a latitude and longitude of 40° 51’ 34”, -75° 15’ 41” (respectively) in Plainfield Township, Northampton County, Pennsylvania (see Figure 1 – Site Location Map).

The proposed process involves the transporting of dewatered biosolids to the proposed Facility where it will be thermally dried to produce a Class A biosolid that can be used as a fertilizer, soil conditioner, and/or a renewable fuel product. Class A biosolids must meet the requirements established under 25 Pa. Code §271.932(a) in regard to pathogens and 25 Pa. Code §271.933(b)(1)–(8) relating to vector attraction reduction, is nonliquid, and is unrecognizable as human waste. The drying process will consist of two (2) fully enclosed belt dryers in parallel, each with a capacity of approximately 200 wet tons per day of biosolid, for total throughput of 400 wet tons per day (84 dry tons per day at 21% dry solids). The dryers will primarily use waste heat recovered from the nearby GKEDC landfill gas-to-energy (LFGTE) plant. The existing stacks of three (3) turbines located at the GKEDC LFGTE plant will be modified to recover waste heat from the stacks via a heat exchanger, transferring the heat into a thermal oil that is routed to the drying equipment. There will also be a supplemental thermal oil heater in the thermal oil loop that can provide additional heat to the thermal drying process as necessary. This supplemental thermal oil heater can be fueled by natural gas or landfill gas (LFG).

Major processes include tipping equipment, a covered biosolid receiving unit, biosolids transfer equipment, belt drying lines, dry product storage silos, and a truck load-out station. The dryer belts and all associated processing equipment will be enclosed. The Facility will be enclosed with the only exhaust point from the dryers being from the scrubber (control device).

The odor control process will be a two-stage chemical scrubber system. The first stage is a packed column which may use an acid wash fluid (sulfuric acid). The second stage may use an alkaline wash fluid (sodium hydroxide). Quantities and locations of materials stored and managed on-Site are provided in Section 1.3.

Process wastewater generated by the drying process will be hauled to the biosolid generator or other approved liquid waste disposal facility. There will not be any process wastewater discharges to local waterbodies. Sanitary wastewater originating from office, restrooms, and employee facilities will be discharged to the local publically owned treatment works operated by the Pen Argyl Municipal Authority (PAMA).

SBHRC will discharge stormwater from the proposed facility following the terms and conditions of the NPDES permit when issued. Stormwater is considered uncontaminated runoff from the

regulated industrial activities on the site. Process wastewater generated by the drying process including, but not limited to, air scrubber blowdown, wash water and precipitation accumulated in receiving unit, product load out and storage tank containment areas will be managed separately and transported to a permitted offsite liquid treatment facility for disposal. Sanitary wastewater generated from site restrooms, break rooms and locker rooms will be conveyed to the Pen Argyl Municipal Authority for treatment and disposal. Process wastewater and sanitary wastewater are managed separately and are not proposed for discharge from the SBHRC under the NPDES permit.

1.2 Description of Existing Emergency Response Plans

The Facility does not currently have existing emergency response plans as it is not currently constructed or operational.

1.3 Material Inventory

The materials inventory is summarized in the following table:

Table 1.3 – Material Inventory

Material	Quantity / Container	Location
Thermal Oil	4,000 gallons / Heat exchanger, expansion tank, and pipeline	Adjacent to GKEDC
Sulfuric Acid	5,000 gallons / AST	Inside Dryer Building
Sodium Hydroxide	3,000 gallons / AST	Inside Dryer Building
Sodium Hypochlorite	5,000 gallons / AST	Inside Dryer Building
Nitrogen (gas)	27,100 ft ³ / Cylinders	Adjacent to Dryer Building
Process Wastewater	300,000 gallons / AST	South of the GKEDC
Trash	4-cubic yard / Dumpster	Parking Area by Dryer Building
Product	26,500 ft ³ each / two silos	Adjacent to Dryer Building
Dewatered Biosolids	12,000 ft ³ each / two units	Adjacent to Dryer Building

None of the above materials stored in bulk storage are combustible, flammable, or explosive.

1.4 Pollution Incident History

The Facility does not have a pollution incident history. Records of all spills or leaks will be maintained with this Plan.

1.5 Implementation Schedule for Plan Elements Not Currently in Place

There are no additional elements necessary for the proposed Facility. SBHRC will implement Plan elements not currently in place upon authorization of this Plan.

2.0 DESCRIPTION OF HOW PLAN IS IMPLEMENTED BY ORGANIZATION

This section presents a description of how the Plan is implemented by the organization. The following subsections describe the various components.

2.1 Organizational Structure of Facility for Implementation

This Plan has been developed by Slate Belt Heat Recovery Center, LLC with the help of EarthRes Group, Inc. The Plan will be implemented by the Plant Manager with the help of designated Site personnel. It is the responsibility of these individuals to maintain information concerning materials inventory, regularly review potential spill sources, establish spill reporting procedures, audit visual inspection programs, and review plant spill incidents.

The Emergency Coordinators will coordinate activities for spill clean-up, notification of authorities, and establishment of training and educational programs for Site personnel. These individuals are also responsible for regularly reviewing the Plan, making any necessary changes and recommendations. The Secondary Emergency Coordinator will coordinate activities in the absence of the Primary Emergency Coordinator. The Back-up Emergency Coordinator will coordinate activities in the absence of both the Primary and Secondary Emergency Coordinators.

New equipment, construction, and process changes will be reviewed relative to the Plan. The Emergency Coordinator will be responsible for filing all reports, annual or otherwise, related to the Plan. Ultimate responsibility for implementation of the Plan lies with the Plant Manager.

2.2 List of Emergency Coordinators

The following is a table of Emergency Coordinators who are thoroughly familiar with all aspects of the Plan and have the authority to commit the resources necessary to implement the Plan.

Table 2.2 – List of Emergency Coordinators

Title	Name	Work Phone	Mobile Phone
Primary Emergency Coordinator	TBD	TBD	TBD
Secondary Emergency Coordinator	TBD	TBD	TBD
Back-up Emergency Coordinator	TBD	TBD	TBD

2.3 Duties and Responsibilities of the Coordinator

During an emergency, the Emergency Coordinator should notify emergency response agencies, identify the problem, assess the health or environmental hazards, and take all reasonable measures to stabilize the situation. The Emergency Coordinator should also be responsible for follow-up

activities after the incident such as treating, storing, or disposing of residues and contaminated soil, decontamination and maintenance of emergency equipment, and submission of any reports. The Emergency Coordinator will do the following whenever there is an imminent or actual emergency situation:

- Activate Facility alarm system to notify associates and response team.
- Notify local emergency response agencies, state response agencies, PADEP, and the National Response Center as needed. Phone numbers and procedures are included in Section 5.0 of this Plan.
- As quickly as possible determine the nature and extent of the problem. The exact source, area and extent of emitted or discharged materials should also be determined as quickly as possible. Evacuation of areas must be carried out if conditions warrant.
- Assess the health and environmental hazards present or imminent. The safety of Facility personnel and others in the area is the most important consideration.
- Take all reasonable measures to stabilize the situation. Protection of emergency responders and Facility personnel is the most important consideration.
- Coordinate the treatment, storage, and disposal of spill residues and contaminated soil.
- Coordinate decontamination and maintenance of emergency equipment.
- Coordinate submission of any required reports.

If the Emergency Coordinator determines that the Facility has had an emission, discharge, fire, or explosion which would threaten human health or the environment, he/she must immediately notify the applicable local authorities including the county emergency management agency and indicate if evacuation of local areas may be advisable; and immediately notify the Department; the National Response Center; and the Pennsylvania Emergency Management Agency; and report the following:

- a. Name of the person reporting the incident;
- b. Name and location of the Facility;
- c. Phone number where the person reporting the spill can be reached;
- d. Date, time, and location of the incident;
- e. A brief description of the incident, nature of the materials or wastes involved, extent of any injuries, and possible hazards to human health or the environment;
- f. The estimated quantity of the materials or wastes spilled; and
- g. The extent of contamination of land, water, or air, if known.

Immediately after an emergency, the Emergency Coordinator, with Departmental approval, must provide for treating, storing, or disposing of residues, contaminated soil, etc., from an emission, discharge, fire, or explosion at the installation.

The Emergency Coordinator must insure that in the affected areas of the Facility, no material or waste incompatible with the emitted or discharged residues is processed, stored, treated, or disposed of until cleanup procedures are completed; and, all emergency equipment listed in this Plan is cleaned and fit for its intended use before operations are resumed.

Within 15 days after the incident, the installation must submit a written report on the incident to the Department. The report must include the following:

- a. Name, address, and telephone number of the individual filing the report;
- b. Name, address, and telephone number of the installation;
- c. Date, time, and location of the incident;
- d. A brief description of the circumstances causing the incident;
- e. Description and estimated quantity by weight or volume of materials or wastes involved;
- f. An assessment of any contamination of land, water, or air that has occurred due to the incident;
- g. Estimated quantity and disposition of recovered materials or wastes that resulted from the incident; and
- h. A description of what actions the installation intends to take to prevent a similar occurrence in the future.

2.4 Chain of Command

If you:

- Observe a spill or release
- Observe a fire or explosion
- Suspect a spill or release is imminent
- Suspect a fire or explosion is imminent

Notify the following people immediately:

- TBD , (Primary Emergency Coordinator):
- TBD , (Secondary Emergency Coordinator):
- TBD , (Back-up Emergency Coordinator):

If you are unable to immediately notify these people, notify your supervisor so that they can make the notifications immediately.

When reporting the emergency situation, relay the following information:

- Your name;
- Your department or area;
- What emergency situation is occurring;
- Where the emergency is located; and
- Extent of any injuries.

3.0 SPILL LEAK PREVENTION AND RESPONSE

3.1 Pre-release Planning

This section describes the sources and areas where potential spills and leaks may occur and the pollution incident prevention practices specific to the source or area.

3.1.1 Thermal Fluid/Oil

Thermal fluid/oil is stored in a 1,300-gallon expansion tank located within the Heat Exchange Pad that provides secondary containment. The heater contains approximately 700 gallons of oil, and the pipeline contains approximately 2,000 gallons of thermal oil.

Sorbent material is available to contain a spill or leak of such fluids.

Thermal fluid/oil is piped and pumped continuously via pipeline (6" diameter carbon steel pipe) from the heater to the Dryer Building. All fill and drain locations occur inside the building.

3.1.2 Sulfuric Acid

Sulfuric acid is stored in a 5,000-gallon aboveground storage tank (AST) located adjacent to the Dryer Building with secondary containment (i.e., AST is double-walled).

The double-walled AST provides secondary containment for 110% of the tank's capacity; however, a spill of sulfuric acid during loading/unloading operations would be captured within the tank containment system.

3.1.3 Sodium Hydroxide

Sodium hydroxide is stored in a 3,000-gallon AST located adjacent to the Dryer Building with secondary containment (i.e., AST is double-walled).

The double-walled AST provides secondary containment for 110% of the tank's capacity; however, a spill of sodium hydroxide during loading/unloading operations would be captured within the tank containment system.

3.1.4 Sodium Hypochlorite

Sodium hypochlorite is stored in a 5,000-gallon AST located adjacent to the Dryer Building with secondary containment (i.e., AST is double-walled).

The double-walled AST provides secondary containment for 110% of the tank's capacity however, a spill of sodium hypochlorite during loading/unloading operations would be captured within the tank containment system.

3.1.5 Process Wastewater

Process wastewater is stored in a 300,000-gallon aboveground storage tank (AST) located just south of the GKEDC facility. This tank is also located within a secondary containment tank to capture any potential spills. The tank will have a leak detection zone under the concrete floor.

3.1.6 Product Silos

Finished product is stored in two (2) product silos located on the south side of the SBHRC. The finished product will be solid and not subject to the same concerns as liquid spills. A truck load-out pad will be located under the silos, and capable of handling spills during product load-out.

3.1.7 Dewatered Biosolids

Dewatered biosolids that arrive at the SBHRC site are stored in one of two (2) receiving units just outside the dryer building. These units will have a lid to contain the material within. In addition, all potential runoff and spills around these receiving units will be captured and pumped to the process wastewater storage tank for appropriate disposal at an approved facility.

3.2 Material Compatibility

All materials are stored in containers, tanks, bins or drums made of materials compatible with the materials handled. Compatibility with other materials on-Site is not a problem given the nature of the materials, the quantities stored and the storage location.

3.3 Inspection and Monitoring Program

Observation of Site activities are carried out by SBHRC employees during operating hours and supervised by the Plant Manager. Employees look for problem areas to prevent releases and accumulation of wastes in areas open to runoff. Problems are reported to their supervisors for corrective action.

3.3.1 Tank and Container Inspections

Inspections to be performed by designated employee(s):

A visual inspection shall be performed monthly of all storage tanks, piping, valves, drum storage areas, and loading/unloading areas. The inspections shall be performed by an employee or employees designated by the Plant Manager. The designated employee(s) are to complete the following forms monthly:

- **Appendix C:** Aboveground Storage Tanks Maintenance/Operations Form
- **Appendix D:** Drum & Small Container Storage And Handling Form

All completed forms are to be placed in the back of the Appendix in which the form was taken from in this Plan.

3.3.2 Drainage from Diked Storage Areas

All ASTs will be double-walled and have an inspection port for monitoring. The process water containment tank will accumulate precipitation. Limited liquid is expected from the chemical ASTs. The key is to be in control of the person responsible for spill prevention. The water from this area is to be drained only when there is no sign of contamination or oil on it. A sample will be pulled and observed. Testing for pH and specific conductivity will be performed. If there is no sign of contamination it will be released. If there is a small amount of oil on the water, it is to be removed with absorbent pads. These pads are to be disposed of per manufacturers' and local regulations. If there is visible contamination, it will be managed as process wastewater.

3.3.3 Records

Inspection & testing records will be signed by the appropriate supervisor or inspector, and are to be kept with this Plan for a minimum of three (3) years. These records should be placed in the appendix in which the form was taken from. All tank integrity testing documentation should be kept for the life of the tank.

3.4 Preventive Maintenance

The Facility will be inspected as described above. Routine maintenance is conducted on the equipment on a regular maintenance schedule. Regular inspections are conducted on all equipment and repairs are made as necessary. Records are kept of equipment maintenance and repair in a computerized maintenance management system (CMMS). The CMMS system will be used to generate routine work orders to track and record activities. Problem areas are reported to the supervisors, and entered in the CMMS, when discovered for corrective action.

3.5 Housekeeping Program

The primary type of housekeeping practices will be those which reduce the possibility of accidental spills and safety hazards to personnel. Storage areas are maintained in a neat and orderly fashion. Brooms are used to keep floors free of debris. Small spills are cleaned immediately by dry measures. Any equipment or machinery stored outside is kept clean, neat, and orderly. Walkways and entryways are kept free from obstructions. Trash is collected regularly on routine basis.

3.6 Security

The Facility is located within the fenced confines of GCSL, kept locked outside of operating hours and a security alarm system is utilized. The Facility is adequately lit for nighttime monitoring. All visitors are required to check in at the main office and sign in upon arrival.

3.7 External Factor Planning

External factors have the potential to interrupt Facility operations. Major external factors and plans for dealing with them are described below:

A **power outage** at the Facility would not adversely affect operations in such a way to cause an environmental release or a safety problem. Operations would be suspended until power returns and activities resume.

Floods: Based on FEMA mapping, the Site lies above the designated FEMA Zone A (100-year) and the designated FEMA Zone X (500-year) of the Waltz Creek. Floodwaters should not interrupt Site operations. SBHRC will take measures to prevent damage to, and releases from, the Site during high water conditions.

Power outages during a flood should be handled the same as other power outages.

Snowstorms should not cause environmental releases or increase the threat of a release. However, snowstorms or other severe winter weather could make emergency response difficult. Efforts will be made by the Facility to keep all areas clear of snow.

Other external factors (such as earthquakes, tornadoes, and windstorms) cannot be planned for in order to prevent releases. However, in the highly unlikely event that such a situation occurs, all reasonable means should be exercised to prevent or contain environmental releases.

Fires of any kind have the potential to cause significant environmental releases. However, any fire is very dangerous, and only trained individuals should combat fires. Fire responders must be made aware of all oils, chemicals, and other substances, which may be affected by the fire.

3.8 Employee Training Program

The primary training that will occur will be to familiarize employees with safety procedures to be followed when working around heavy equipment. Employees will be trained in procedures to follow in the event of an accident where an employee is injured on Site.

Employee training will instruct employees on proper procedures to initiate in the event of an inadvertent spill of fluid or fuel from operating equipment including proper spill response techniques and notification requirements.

3.9 Facility Transfer Operations

Product transfer operations are performed under the observation of trained delivery personnel. Delivery personnel are assigned to monitor all storage tanks during filling by tank trucks. Their duties include monitoring the levels of vessels being filled, and ceasing the flow of product once a vessel reaches the desired level.

Inbound material offloading is confined to the receiving area where trailers empty biosolids into the receiving and storage tanks. Upon offloading biosolids into the enclosed receiving unit, trailers will have the tailgates washed and proceed to the scales to weigh out. The vehicles will return to the truck tipper in order to accept/load process wastewater pumped from the above process wastewater storage tank. A metered process wastewater fill station connects to the truck with positively sealed fittings and ensures fill volumes do not exceed the truck tank capacity. These trucks will depart the site when full. Outbound product is loaded into trailers under one of two product storage silos. After loading, trucks are weighed and depart the site.

The tipping equipment and product loading pads are designed to contain spills and precipitation. Any accumulated wastewater will be conveyed to the process wastewater tank for storage prior to off-site disposal.

Any tank trucks making deliveries to the Site are inspected by delivery personnel prior to off-loading to confirm the condition and integrity of the vehicle and the transfer connection lines, valves, flanges, and fittings.

All hoses used for product transfer operations are visually inspected prior to use. Any hose that appears damaged is not used. All hose connections to fixed piping and to delivery vehicles are inspected by the delivery personnel prior to initiating the flow of product and during product transfer operations.

4.0 COUNTERMEASURES

4.1 Countermeasures to be Undertaken by Facility

In the event of a spill, leak or release, SBHRC personnel will advise their immediate supervisor who will assess the situation and determine the course of action. The Facility will implement immediate response measures to the extent safe and practicable at the Site to contain a release on-Site using available material and equipment.

SBHRC will undertake the cleanup of minor or non-reportable releases at the Facility and has developed standard operating procedures (SOP's) for certain occurrences. The Emergency Coordinator will be responsible for the cleanup and appropriate disposal of any contaminated media generated during the cleanup. Following completion of the cleanup, the Emergency Coordinator will be responsible for reviewing the cause of the incident and implementing the necessary measures to prevent future occurrences.

4.1.1 Spills and Releases

Safety data sheets (SDS) for the spilled material must be reviewed before any other action is taken. Spill responders must put on proper personal protective equipment (PPE) and must take other action as necessary to reduce hazards posed by the spill. This action includes the removal of incompatible chemicals from the area and the evacuation of the immediate area of the spill. SDS of the chemicals proposed for use at SBHRC are provided in **Appendix H**.

If the Emergency Coordinator determines that the situation is too dangerous for Facility responders to handle, outside assistance will be called in. Generally, response contractors will be called in the event of a reportable release at the Facility. Facility responders should be evacuated if necessary.

4.1.2 Liquid Spills to Asphalt/Macadam/Concrete Surfaces and Not Reaching Storm Sewers or Surface Water

Absorbent pigs, mats, and oil dry must be used to contain the spill and prevent further migration. Efforts should be made to stop the release (if not already done) and to prevent the spill from reaching storm sewers or surface water. The spill should be cleaned up and spill residues and cleanup materials should be placed in appropriate containers. The drums must be labeled so that they can be disposed of properly. All contaminated equipment should be cleaned if possible or placed in the drums for disposal.

4.1.3 Liquid Spills to Ground Surface

The same controls should be used to contain spills on bare ground as those detailed in the asphalt/macadam/concrete surface spill section above. Additionally, shovels or

other equipment should be used to construct emergency berms and containment structures to prevent further spread of the spill. Once the spill is stabilized, it must be cleaned up as soon as possible. Spill residues and cleanup materials should be placed in appropriately labeled containers. Contaminated soils must also be removed as soon as possible and must be treated or disposed of properly. All contaminated equipment must be cleaned up if possible or placed in drums for disposal.

4.1.4 Spills Reaching Surface Waters

Spills which reach surface water must be responded to quickly. This is even more important if it is raining. Attempts will be made to stop the spill if the spill has not reached surface waters. This can be done by using soil, absorbent materials, or any other material, which will stop the flow of the spill. The entry of additional liquids into surface waters must be stopped at the point where the spill is entering. If it is raining, this response method may be impossible.

If the spill reaches surface waters or entry into surface waters is imminent, steps will be taken to contain the spill and remove it from the water.

In the event of an oil spill, the majority of the oil will float on top of the water. Straw bales placed across areas of flow are effective at capturing floating oil. Absorbent materials should be used to contain the oil until cleanup can be conducted. Once the oil is contained it should be removed from the water by pumping, skimming, or by adsorbents if possible. All soil, vegetation, debris, and cleanup materials contaminated by oil must be collected and disposed of properly.

In the event of a spill of materials other than oil, the spill may not float on the water. This will make recovery much more difficult. If any oils are contained in the product or appear on the water surface, the same methods used to handle oil spills can be used to handle this oil fraction. However, substances that dissolve in water or become dispersed in the water must be contained by other means.

4.2 Countermeasures to be Undertaken by Contractors

Response contractors will generally be called in the event of a reportable release from the Facility. The following services can be provided by emergency response contractors: spill cleanup, pumping of contaminated water and spill residue, backhoe work, waste disposal, and removal/stabilization of damaged drums or tanks. It will be up to the Emergency Coordinator to decide whether these services are needed during a release.

Contact for Emergency Response Contractor

- Rapid Response, Inc., Northampton, PA - (877) 460-1038
- Lewis Environmental, Royersford, PA - (610) 495-6695

4.3 Internal and External Communications and Alarm Systems

Key operations personnel have cellular telephones as part of the internal communication network for use in the event of an incident. The telephones allow contact with contractors and regulatory agencies if required.

Local police department, fire department, hospital/medical facilities, local emergency management agency, and response contractors can be summoned from any phone at the numbers listed below.

List of Emergency Assistance Contacts

- Lookout Fire Company No. 1 – 911 or (610) 863-4121 (Non-Emergency)
- Pen Argyl Police Department – 911 or (610) 863-6704 (Non-Emergency)
- Easton Hospital – (610) 250-4000
- St. Luke's University Health Network – Easton – (484) 503-3000
- Lehigh Valley Hospital – (610) 402-8000
- Pocono Medical Center – (570) 421-4000
- Northampton County Emergency Management Services – (610) 746-3194
- Rapid Response, Inc. – (877) 460-1038
- Lewis Environmental – (610) 495-6695

4.4 Evacuation Plan for Facility Personnel

The Emergency Coordinator must decide whether an evacuation is necessary. When the evacuation order is given, all Site personnel must evacuate immediately through the nearest usable exit and gather at the evacuation meeting point designated by the Emergency Coordinator. Some routes may not be usable during an emergency. Routes near the release, spill, or fire area must not be used.

4.5 Emergency Equipment Available for Response

The following equipment, categorized by type, is maintained at the Site:

Fire/Safety

Portable Fire Extinguishers – located throughout Facility

First Aid Kits – located throughout the Facility

Spill Control/Cleanup

Spill kits (booms, pigs, pads, oil dry) – located inside a storage container in the Dryer Building.

Additional equipment may be on hand at the Facility.

5.0 EMERGENCY SPILL CONTROL NETWORK

5.1 Arrangements with Local Emergency Response Agencies and Hospitals

The following local emergency response agencies will be contacted to respond to emergencies at the Facility:

- Lookout Fire Company No. 1 – 911 or (610) 863-4121 (Non-Emergency)
- Pen Argyl Police Department – 911 or (610) 863-6704 (Non-Emergency)
- Easton Hospital – (610) 250-4000
- St. Luke's University Health Network – Easton (484) 503-3000
- Lehigh Valley Hospital – (610) 402-8000
- Pocono Medical Center – (570) 421-4000
- Northampton County Emergency Management Services – (610) 746-3194
- Rapid Response, Inc. – (877) 460-1038
- Lewis Environmental – (610) 495-6695

The Emergency Coordinator will serve as the Facility contact for these agencies during an emergency. Directions to emergency medical facilities are included in **Appendix E**.

5.2 Notification Lists

In the event of a spill or release, SBHRC will contact the agencies listed below:

- Pennsylvania Department of Environmental Protection (PADEP) -
Northeast Regional Office, Wilkes-Barre – (570) 826-2511
Bethlehem District Office – (610) 861-2070
Statewide Emergency Number – (800) 541-2050
- Northampton County Emergency Management Services – (610) 746-3194
- National Response Center – (800) 424-8802

In accordance with 25 Pa. Code §91.33, if because of an accident or other activity or incident a toxic substance or another substance which would endanger downstream users of the waters of the Commonwealth, would otherwise result in pollution or create a danger of the waters, or would damage property, is discharged into these waters – including sewers, drains, ditches or other channels of conveyance into the waters – or is placed so that it might discharge, flow, be washed or fall into them, SBHRC will immediately notify the Department by telephone of the location and nature of the danger and, if reasonably possible to do so, to notify known downstream users of the waters.

In accordance with the reporting requirements of 40 CFR §122.41(1), the permittee must give at least a 24-hour advanced notice to PADEP of any planned changes to the permitted activity or Facility that may result in noncompliance with permit requirements. In addition, the permittee shall also report noncompliance with any term or condition of the Permit, and any statute, rule or regulation, to PADEP within 24 hours of becoming aware of the noncompliance. Where oral notification of noncompliance is made, a written report outlining the same information must be completed, kept on file and submitted to PADEP upon request.

The following are important numbers to be used as required or directed by the aforementioned agencies:

- Lookout Fire Company No. 1 – 911 or (610) 863-4121 (Non-Emergency)
- Pen Argyl Police Department – 911 or (610) 863-6704 (Non-Emergency)
- USEPA – (800) 535-0202
- PA Emergency Management Agency – (800) 424-7362
- PA Boat and Fish Commission – (855) 347-4545
- OSHA – (800) 321-6742
- Chemtrec – (800) 424-9300

5.3 Downstream Notification Requirement for Storage Tanks

The Facility does not have aboveground storage tank containing regulated substances with a capacity of greater than 21,000 gallons. Therefore, the Facility is not subject to the Downstream Notification requirements.

6.0 STORMWATER POLLUTION PREVENTION PLAN (SPPP)

6.1 Stormwater Management Practices

The majority of the proposed project operations occur within a building and are not exposed to stormwater. Sediment Basin #2 will be modified in order to accommodate the proposed Facility. The basin is and will continue to function as a zero-discharge basin for up to and including the 100-year storm event. Stormwater runoff from the Site flows as sheet flow in a generally southeasterly direction into the permitted, existing, engineered, non-discharging stormwater collection pond (Sediment Basin #2). SBHRC will obtain an individual NPDES permit for site run-off to allow monitoring of run-off from site industrial activities.

6.2 Potential Pollutant Sources

6.2.1 Exposed Significant Materials

The unloading receiving unit will have a retractable cover that will be closed until a vehicle is on the tipping equipment to unload. The cover will then be opened, the truck is raised until the biosolids are discharged into the receiving unit. Then the cover will be closed. The truck pad will provide containment for the tailgate wash water and any spilled biosolids or product. Stormwater from this area will be managed as process wastewater, and conveyed to the storage tank prior to transportation to off-Site disposal.

Biosolid drying occurs within the Dryer Building and is not exposed to stormwater. The process wastewater storage tank will have a roof and be located within a containment tank.

Dry product will be stored in enclosed silos and are not exposed to stormwater. The silos will have roofs. Spillage during load out will be contained on the concrete pad and accumulated liquids will be managed as process wastewater.

6.2.2 Past Spills and Leaks

The Facility does not have a history of past spills or leaks.

6.2.3 Non-Stormwater Discharges

The proposed project plans to submit a National Pollutant Discharge Elimination System Application Individual Permit for Discharges of Stormwater Associated with Industrial Activity to PADEP under separate cover.

6.2.4 Stormwater Monitoring Data

All proposed project operations occur within a building and are not exposed to stormwater. Roof runoff, along with stormwater runoff, flows off-Site in a southeasterly direction as sheet flow. No representative stormwater outfall or data collection point currently exists at the Facility. After the Site improvements have been constructed, a drainage swale will be utilized for sampling runoff from the operations area.

The proposed project plans to submit a National Pollutant Discharge Elimination System Application (NPDES) for Individual Permit for Discharges Stormwater Associated with Industrial Activity to PADEP under separate cover; therefore, stormwater monitoring data is not currently recorded or maintained by the Facility. Required stormwater monitoring will be implemented upon issuance of individual permit to discharge stormwater associated with industrial activities.

6.2.5 Summary of Potential Pollutant Sources

All Facility activities occur within the Dryer Building and are not exposed to precipitation; however, the following items have been provided to be conservative:

Thermal fluid/Oil: Thermal fluid/oil is contained within the closed loop system. All system fill points will be located within the Dryer Building.

A spill of thermal fluid/oil during operations would be contained on the concrete floor of the Dryer Building. Sorbent material is available to contain a spill or leak of such fluids.

Sulfuric Acid: Sulfuric acid is stored in one (1) 5,000-gallon aboveground storage tank (AST) located adjacent to the Dryer Building with secondary containment (i.e., AST is double-walled).

The double-walled AST provides secondary containment for 110% of the tank's capacity.

Sodium Hydroxide: Sodium hydroxide is stored in one (1) 3,000-gallon aboveground storage tank (AST) located adjacent to the Dryer Building with secondary containment (i.e., AST is double-walled).

The double-walled AST provides secondary containment for 110% of the tank's capacity.

Sodium Hypochlorite: Sodium hypochlorite is stored in one (1) 5,000 gallon AST located adjacent to the Dryer Building, with secondary containment (i.e., AST is double-walled).

The double-walled AST provides secondary containment for 110% of the tank's capacity.

Process Wastewater Tank: Process wastewater is stored in one (1) 300,000-gallon aboveground storage tank (AST) located just south of the GKEDC. The tank will have a leak detection zone under the concrete floor. Secondary containment is provided along with leak detection pursuant to the PADEP residual waste storage regulations to mitigate the possibility of any spill.

The Site generates process wastewater from the condensing operation and air scrubbers, and wash water. Stormwater collected near the receiving unit is also collected and stored in the process wastewater storage tank. Liquid from the process wastewater storage tank is transported off-Site to an approved liquid waste disposal facility for disposal.

6.3 Best Management Practices (BMP's)

6.3.1 BMPs Applicable to SIC Code 4953

The Facility will follow the below BMPs for chemical material storage areas to be conservative:

1. Store drums, including empty or used drums, in secondary containment with a roof or cover (including temporary cover such as a tarp that prevents contact with precipitation).
2. Provide secondary containment with sufficient capacity to contain a spill (the greater of 10 percent of the total enclosed tank volume or 110 percent of the volume contained in the largest tank).
3. Locate material storage areas away from high traffic areas and surface waters.
4. Inspect storage tanks and piping systems (pipes, pumps, flanges, couplings, hoses, and valves) for failures or leaks and perform preventive maintenance.
5. Clearly label drums with their contents.
6. Maintain an inventory of fluids to identify leakage.
7. Properly dispose of chemicals that are no longer in use.
8. Store and handle liquids in compliance with applicable local fire codes, local zoning codes, and the National Electric Code.
9. Provide drip pads/pans where chemicals are transferred.
10. Have materials such as absorbent pads easily accessible to clean up spills.
11. Develop and implement a Contingency Plan.

12. Train employees in spill prevention and control and proper materials management.

6.3.2 Good Housekeeping

Every attempt will be made to maintain the storage areas in a neat and orderly fashion. Brooms are used to keep floors free of debris. Small spills are cleaned immediately by dry measures. Any equipment or machinery stored outside is kept clean, neat, and orderly. Walkways and entryways are kept free from obstructions. Trash is collected regularly on routine basis. Floors and ground surfaces will be kept clean to the greatest extent practical. Solid waste will be placed only in designated trash receptacles or dumpsters. Associates will be encouraged to maintain neat and orderly work areas.

6.3.3 Preventive Maintenance

Preventive maintenance involves the regular inspection and testing of equipment and operational systems. A system will be used to generate work orders and to track inspections and maintenance activities. These inspections are necessary to detect conditions, which could cause a breakdown or failure that may result in discharges of oil to the stormwater system.

6.3.4 Visual Inspections

Visual inspections are a means to ensure that all the elements of the stormwater pollution prevention plan are in place and working properly. They are intended to identify conditions which may potentially cause contamination of stormwater runoff.

Visual inspections of the Facility will be performed on a regular basis by an individual trained to identify stormwater problems. Areas to be inspected include the parking areas, loading/unloading areas, and any other areas identified as potential pollutant sources. These inspections will be documented and maintained with this Plan.

6.3.5 Spill Prevention and Response

Spill prevention and response includes practices to minimize the potential for stormwater pollution from spills and leaks. Spills and leaks can be one of the largest contributors of stormwater pollutants.

Areas with significant potential for spills and leaks include the loading and unloading areas, and any other area where products or wastes are stored. Associates working in these areas will be trained how to properly handle materials in order to minimize the

potential for spills and leaks. Associates will be trained in spill response procedures. Spill containment and cleanup equipment will be placed in readily accessible areas.

6.3.6 Sediment and Erosion Control

This BMP is covered in more detail in Section 9.0 of this Plan. Sediment and erosion control practices are designed to minimize soil erosion in areas which have a high potential for erosion due to activities, topography, or other factors. There are no areas at the Facility which have a high potential for erosion.

During any new construction activities, silt fences, tarps, berms, or other stabilization techniques must be used to minimize erosion. If the construction area is large enough, a separate approval may be required.

6.3.7 Management of Runoff

Stormwater runoff from the Site flows as sheet flow in a generally southerly direction into the proposed stormwater controls. Runoff from the Site will be monitored pursuant to the Site's NPDES permit and discharge into Sediment Basin #2, a non-discharging basin serving SBHRC, GKEDC, and GCSL.

6.3.8 Associate Training

Training covering all aspects of stormwater pollution prevention will be conducted on an annual basis. The training program will address proper practices required to minimize the potential for stormwater pollution. These practices include good housekeeping, spill prevention and response, preventive maintenance, and proper material handling and storage.

Training events will be documented and records will be maintained at the Facility with this Plan.

6.3.9 Recordkeeping and Reporting

Incidents and activities related to stormwater, which occur at the Facility, will be documented and maintained with this Plan. These incidents and activities include significant spills or leaks, inspections, maintenance activities and training sessions. Records must be maintained with the Plan for a minimum of three (3) years.

Records of significant spills or leaks should include the date and time of the incident, weather conditions, duration, cause, environmental problems, response procedures, parties notified, and any recommended revisions of procedures or equipment to prevent recurrence. Also any reports to the National Response Center for a reportable quantity spill should be documented.

Inspection reports should include a description of the areas inspected, problems that were noted, and recommendations for corrective actions. The reports should also include any field notes made during the inspection.

Maintenance records will include a description of the maintenance being performed and the purpose of the maintenance. If the maintenance is being performed as the result of a problem noted during an inspection, the report should discuss the success in correcting the problem and if additional work needs to be performed.

Records of stormwater training sessions should include the type of training, the topics discussed, and a list of attendees.

6.4 Annual Evaluation

All proposed project operations occur within a building and are not exposed to stormwater. Roof runoff, along with stormwater runoff, flow off-Site in a southeasterly direction as sheet flow. No representative stormwater outfall or data collection point currently exists at the Facility.

The proposed project plans to submit a National Pollutant Discharge Elimination System Application for Individual Permit for Discharge of Stormwater Associated with Industrial Activity to PADEP under separate cover; therefore, stormwater monitoring data is not currently recorded or maintained by the Facility. Required stormwater monitoring will be implemented upon issuance of individual permit to discharge stormwater associated with industrial activities.

7.0 FACILITY TANK CAR AND TANK TRUCK LOADING/UNLOADING RACK

The Facility does not have a loading/unloading rack; therefore, pursuant to guidance contained in the United States Environmental Protection Agency's SPCC Guidance for Regional Inspectors, Version 1.0, the requirements contained in 40 CFR Part 112.7(h) are not applicable.

8.0 BRITTLE FRACTURE EVALUATION REQUIREMENTS

The Facility does not have any field-constructed petroleum tanks on-Site; therefore, pursuant to guidance contained in the United States Environmental Protection Agency's SPCC Guidance for Regional Inspectors, Version 1.0, the requirements contained in 40 CFR Part 112.7(i) are not applicable.

9.0 SEDIMENT AND EROSION PREVENTION

Sediment and erosion control practices will be implemented in accordance with the Site's NPDES permit. Those controls will be in place during the construction of the proposed Facility and will be supplemented as depicted on the Erosion and Sediment Control Plan. Upon completion of construction, earth disturbance activities associated with the Facility will cease.

10.0 ADDITIONAL REQUIREMENTS FOR EPCRA SECTION 313 FACILITIES

Based on the Facility's North American Industry Classification System (NAICS) Code of 562219 and Standard Industrial Classification (SIC) Code of 4953, the Facility is an EPCRA 313 Facility, regulated under the Resource Conservation and Recovery Act (RCRA). The Facility will use sulfuric acid; however because the sulfuric acid will exist in an aqueous state (not an aerosol) it is exempt from EPCRA Section 313's additional requirements.

11.0 CERTIFICATION FOR NON-STORMWATER DISCHARGES

This form will be completed as required for the Facility covered by the Plan.

All stormwater discharges from this Site have been inspected for the presence of non-stormwater discharges. A description of the on-Site drainage points which were directly observed are detailed below.

Non-Stormwater Discharge Summary:

Date of Inspection: _____

Outfalls directly observed: _____

Methods used: _____

Results and Comments: _____

Person performing inspection: _____

If outfall was not observed, state reason:

Date of previous non-stormwater certification: _____

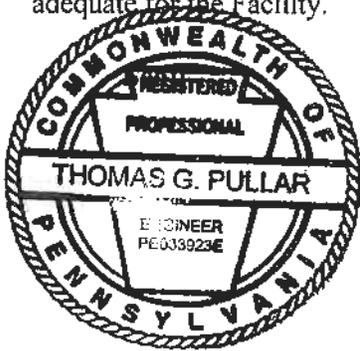
I hereby certify that there are no unauthorized non-stormwater discharges from the Slate Belt Heat Recovery Center, LLC Facility.

	<u>PRODUCTION / VP-ENGINEERING</u>	<u>N/A</u>	<u>3/13/2018</u>
	Signature and Title	Date Observed	Date Signed
<hr/>			
	Signature and Title	Date Observed	Date Signed

13.0 PLAN CERTIFICATION

CERTIFICATION

The undersigned hereby attests that the provisions of 40 CFR, Part 112 are understood, the Facility discussed herein has been examined, that this Plan has been prepared in accordance with good engineering practices including consideration of applicable industry standards, that procedures for required inspections and testing have been established, and that the Plan is adequate for the Facility.



THOMAS G. PULLAR

Printed Name of Registered Professional
Engineer

Thomas G. Pullar

Signature of Registered Professional
Engineer

Date: 03/20/2018

Registration No.: PE033923E State: PA

This certification in no way relieves the owner or operator of the Facility of their duty to fully implement this Plan in accordance with the regulations.

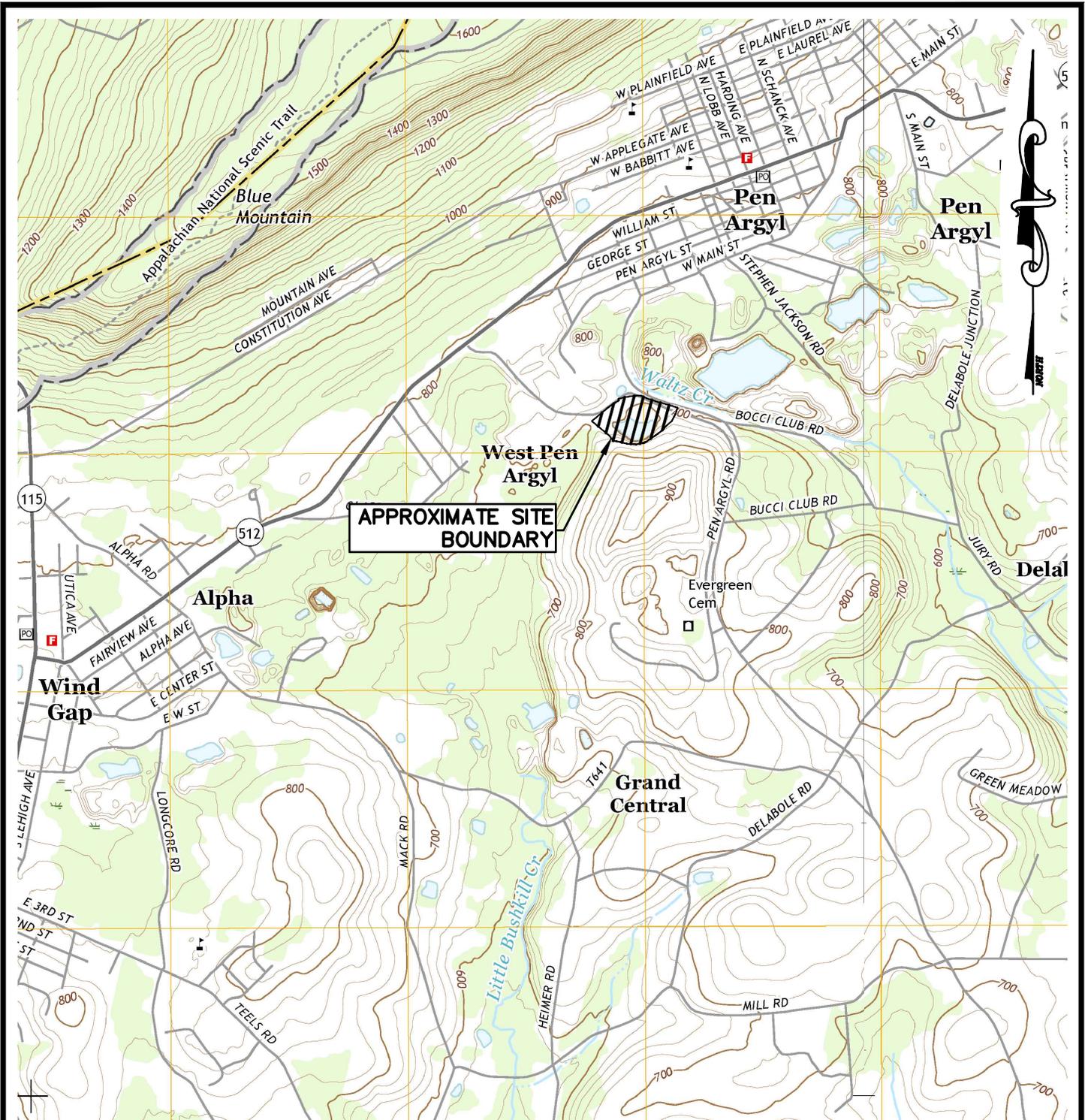
MANAGEMENT APPROVAL

This Plan has the full approval of management and the necessary resources to implement the Plan will be made available. This Plan will be fully implemented as herein described.

Signature [Handwritten Signature]
Name JOHN P. GOODWIN
Title VP - ENGINEERING
Date 3/13/2018

FIGURE 1

Site Location Map



APPROXIMATE SITE BOUNDARY

LEGEND

- SCHOOL
- FIRE STATION
- CEMETERY
- POST OFFICE

SOURCE: USGS 7.5 MINUTE QUADRANGLE - WIND GAP AND BANGOR, PA



P.O. Box 468
6912 Old Easton Road
Pipersville, PA 18947 USA

1224C Pineview Drive
Morgantown, WV 26505

www.earthres.com

PA office 215.766.1211
WV office 304.212.6866
toll free 800.264.4553

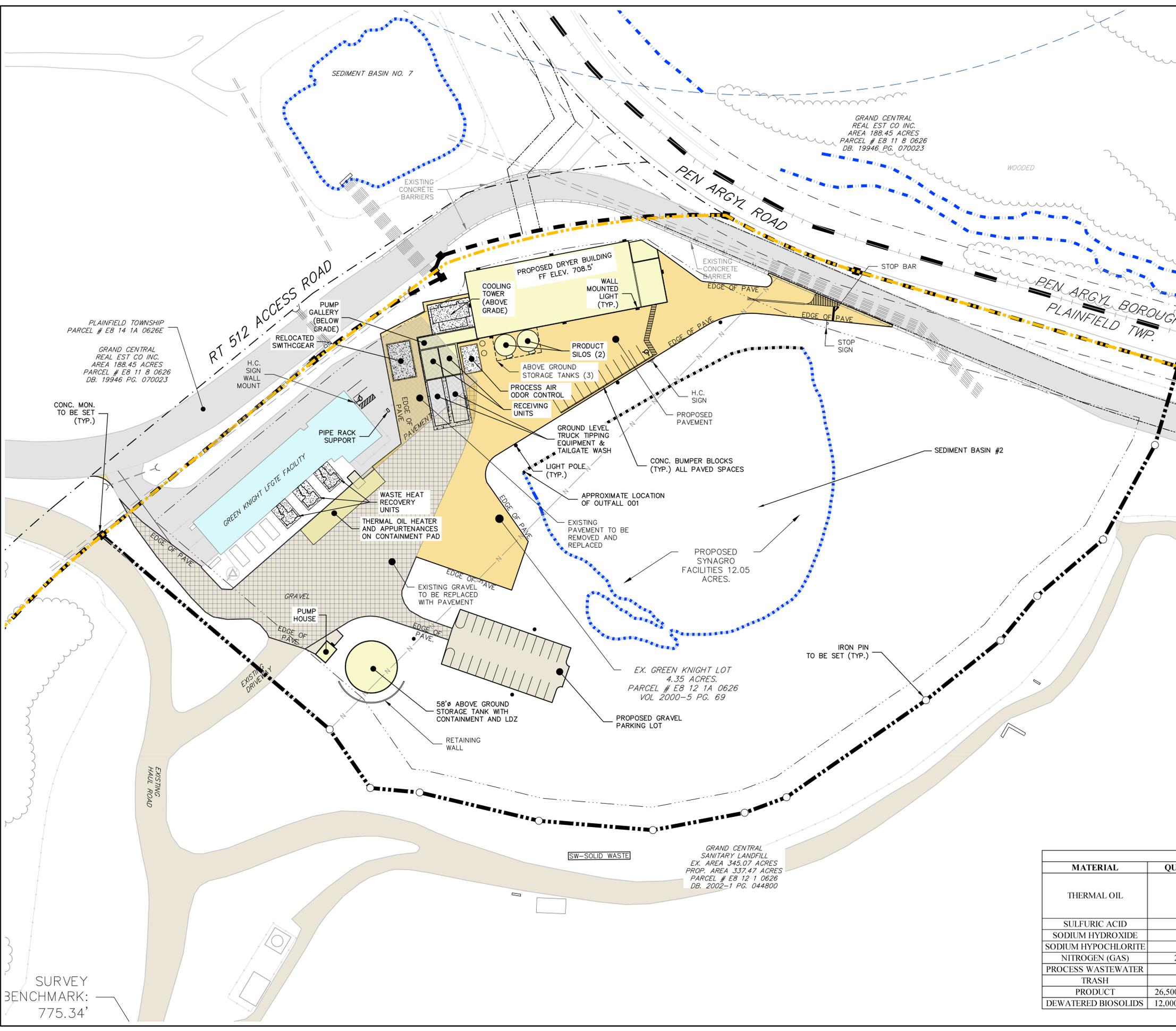
DRAWN BY: SP	CHECKED BY: TGP
DATE: 03/06/2018	PROJECT NO: 151014.003
DRAWING SCALE: 1" = 2000'	

**FIGURE 1
SITE LOCATION MAP**

**SLATE BELT HEAT RECOVERY CENTER
PLAINFIELD TOWNSHIP, NORTHAMPTON COUNTY
PENNSYLVANIA**

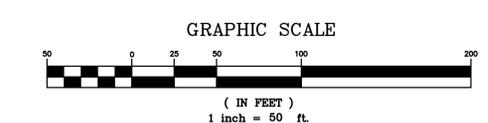
FIGURE 2
Facility Plan

F:\PROJECTS\Synagro\151014.004 Permuting Proposal Rev 2018\CAD\Drawings\Rev 0\FIGURE 2 - CONTINGENCY.dwg Layout: FIGURE 2 - CONTINGENCY User: esinkler 03/19/2018 15:17



LEGEND

- EXISTING PAVING
- PROPOSED PAVING
- PROPOSED BUILDING/STRUCTURE
- EXISTING GRAVEL TO BE REPLACED WITH PAVING
- PROPOSED CONCRETE PADS
- GCSL PROPERTY-R/W BOUNDARY LINE
- ADJACENT PROPERTY BOUNDARY
- BUILDING SETBACK LINE
- PA DOT ULTIMATE RIGHT OF WAY
- PROPOSED PROPERTY BOUNDARY
- EXISTING CHAIN LINK FENCE
- EXISTING PROPERTY LINE TO BE REMOVED
- EXISTING STREAMS/PONDS
- PROPOSED POND EDGE
- EXISTING SEDIMENT BASIN
- EXISTING STORM PIPE
- IRON PIN TO BE SET
- CONCRETE MONUMENT TO BE SET
- GCSL PERMIT BOUNDARY



- ### NOTES:
- EXISTING GRADE CONTOURS AND SITE FEATURES FROM PHOTOGRAMMETRIC DIGITAL MAPPING BY MID-ATLANTIC PHOTOGRAMMETRIC SERVICES, INC. DATE OF PHOTOGRAPH NOVEMBER 11, 2017.
 - PERIMETER BOUNDARY DEVELOPED FROM SURVEY PERFORMED BY THOMAS MICHAEL ENGLERTH, NOVEMBER 1988; DEED PLOT BY CHARLES SOROKA, PLS, MARCH, 1996; REVIEW OF NORTHAMPTON COUNTY TAX MAPS; AND LEHIGH & NORTHAMPTON DIGITAL GEOGRAPHIC DATA, VERSION 4.0 (10/2005).
 - THE SITE IS LOCATED OUTSIDE THE 100-YEAR FLOODPLAIN AS REFERENCED FROM THE FLOOD INSURANCE RATE MAPS (FIRM) AS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AREA (FEMA). FEMA FIRM #42095C0132E.
 - THE ENTIRE AREA WITHIN THE PROPOSED PROPERTY BOUNDARY, INCLUDING MATERIALS, WILL BE BONDED AS REQUIRED BY THE DEPARTMENT.

MATERIAL INVENTORY		
MATERIAL	QUANTITY (GALLONS)	LOCATION/CONTAINMENT
THERMAL OIL	4,000	HEAT EXCHANGER, EXPANSION TANK, AND PIPELINE LOCATED BY GKEDC (ENTIRE THERMAL OIL SYSTEM)
SULFURIC ACID	5,000	ADJACENT DRYER BUILDING
SODIUM HYDROXIDE	3,000	ADJACENT DRYER BUILDING
SODIUM HYPOCHLORITE	5,000	INSIDE DRYER BUILDING
NITROGEN (GAS)	27,100 CUBIC FEET	ADJACENT DRYER BUILDING
PROCESS WASTEWATER	300,000	SOUTH OF GKEDC
TRASH	4-CUBIC YARDS	PARKING AREA BY DRYER BUILDING
PRODUCT	26,500 CU FT EACH (2 SILOS)	ADJACENT TO DRYER BUILDING
DEWATERED BIOSOLIDS	12,000 CU FT EACH (2 UNITS)	ADJACENT TO DRYER BUILDING

SURVEY BENCHMARK:
775.34'

		FACILITY PLAN SLATE BELT HEAT RECOVERY CENTER PLAINFIELD TOWNSHIP, NORTHAMPTON COUNTY, PA									
PREPARED FOR: 6012 Old Eastern Road Pipersville, PA 18947 USA 8000 Corns Farm Drive Northampton, NY 12868 www.earthres.com 212.756.1211 fax: 610.254.4555	PREPARED BY: JLB DATE: 3/13/18 DRAWING NUMBER: FIGURE 2	REVISIONS <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table> SHEET 1 OF 1	NO.	DATE	BY						
NO.	DATE	BY									

FIGURE 3

Facility Floor Plan

APPENDIX A

Substantial Harm Criteria Certification

SUBSTANTIAL HARM CRITERIA CERTIFICATION

Under the requirements of the Oil Pollution Act of 1990 (40 CFR 112.20), facilities that pose a risk of causing substantial or significant and substantial harm to the environment from an oil spill are required to prepare facility response plans. A copy of the completed "Certification of the Applicability of the Substantial Harm Criteria", which dictates whether or not a facility response plan is needed, must be kept with the SPCC Plan. If a facility meets one of the two following substantial harm criteria, they are required to develop and submit a facility response plan:

- Transfers oil over water to or from vessels and has a total oil storage capacity greater than 42,000 gallons; or
- The facility's total oil storage capacity is greater than 1 million gallons and also:
 - Lacks secondary containment adequate for the largest tank in each containment;
 - Is in close proximity to a sensitive waterway or public drinking water system; or
 - Has spilled more than 10,000 gallons within the past 5 years.

Facilities that do not meet either criteria and therefore are not required to submit a facility response plan must keep a signed certification in their SPCC plan indicating that the substantial harm criteria has not been met.

The Slate Belt Heat Recovery Center does not meet either substantial harm criteria and therefore does not require a facility response plan. Consequently, the Facility has provided the completed "Certification of the Applicability of the Substantial Harm Criteria" form on the following page.

CERTIFICATION of the APPLICABILITY of the SUBSTANTIAL HARM CRITERIA

Does the facility transfer oil over-water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes _____ No X

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and, within any storage area, does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation?

Yes _____ No X

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Appendix C of 40 CFR 112.20 or a comparable formula) such that the discharge from the facility could cause injury to fish and wildlife and sensitive environments?

Yes _____ No X

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula in Appendix C of 40 CFR 112.20 or a comparable formula) such that the discharge from the facility would shut down a public drinking water intake?

Yes _____ No X

Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes _____ No X

Certification:

“I certify under penalty of law that I have personally examined and am familiar with the information submitted above, and that based on my inquiry of those individuals responsible for obtaining information, I believe that the submitted information is true, accurate, and complete.”

<p><i>Name (Type or print)</i></p> <p>Thomas G. Pullar, P.E.</p>	<p><i>Title</i></p> <p>Senior Project Manager EarthRes Group, Inc.</p>
<p><i>Signature</i></p> 	<p><i>Date</i></p> <p>03/14/2018</p>

APPENDIX B

PPC and SPCC Cross-Reference

PPC and SPCC Cross-Reference

Final SPCC Rule	Old SPCC Rule	Description of Section	Section
§ 112.7	§ 112.7	General requirements for SPCC Plans for all facilities and all oil types.	Introduction
§ 112.7(a)	§ 112.7	Facility Physical Layout and Description	1.1 – 1.4
		Oil Storage Inventory	1.3
		Discharge Prevention	3.0
		Discharge/Drainage Control	3.1
		Countermeasures	4.0
		Methods of Disposal	4.2
		Contact Lists	2.1, 2.2, 2.4, 4.2, 4.3, 4.5, 5.1, 5.2
§ 112.7(b)	§ 112.7(b)	Fault analysis.	3.1
§ 112.7(c)	§ 112.7(c)	Secondary containment.	3.1, 6.2.5
§ 112.7(d)	§ 112.7(d)	Contingency planning.	3.0
§ 112.7(e)	§ 112.7(c)(8)	Inspections, tests, and records.	3.3, 6.2.4, 6.3.4, 6.4
§ 112.7(f)	§ 112.7(e)(10)	Personnel, training, and discharge prevention procedures.	3.8, 6.3.8
§ 112.7(g)	§ 112.7(e)(9)	Security (excluding oil production facilities).	3.6
§ 112.7(h)	§ 112.7(c)(4)	Facility tank car and tank truck loading/unloading rack (excluding offshore facilities).	7.0
§ 112.7(i)	n/a	Brittle fracture evaluation requirements.	8.0
§ 112.7(j)	§ 112.7(e)	Conformance with state requirements.	Introduction
§ 112.8(a) § 112.12(a)	n/a	General and specific requirements.	Introduction
§ 112.8(b) § 112.12(b)	§ 112.7(e)(1)	Facility drainage.	6.1, 6.2.4, 6.3.7, 6.4
§ 112.8(c) § 112.12(c)	§ 112.7(c)(2)	Bulk storage containers.	3.1, 3.2, 3.3, 6.2.5
§ 112.8(d) § 112.12(d)	§ 112.7(e)(3)	Facility transfer operations, pumping, and facility process.	3.9

APPENDIX C

**Aboveground Storage Tanks Maintenance/Operation Monthly
Checklist**

ABOVEGROUND STORAGE TANKS MAINTENANCE / OPERATION MONTHLY CHECKLIST

Facility Name: _____

ITEM

SYMBOL

REFERENCE

(Identify Tank & Required Action)

I. Visual Check for Deterioration

Condition of tank exterior	A	U	
Condition of aboveground piping	A	U	
Condition of foundations and supports	A	U	
Condition of containment structures	A	U	
Condition of hoses, connections, clamps, & conduit seals	A	U	
Condition of pumps	A	U	

II.

Containment Areas

Level of standing water in containment	A	U	
Drain Valves secured in a closed position	Y	N	
Debris or fire hazard in containment	Y	N	

III. Leak Detection System

Leak detection system monitored	Y	N	
Regulated Substance in containment area	Y	N	
Evidence of release from tank	Y	N	
Evidence of release from ancillary equipment including piping	Y	N	

IV. Ancillary Equipment

Overfill prevention device functioning properly (if installed)	Y	N	
Valves functioning properly	Y	N	
Vents clear of restrictions	Y	N	
Gauge or monitoring device functioning properly (if installed)	Y	N	
Hoses are free of cuts, tears, blisters, etc.	Y	N	

V. Safety Precautions

Safety equipment in place and operative (including spill kits)	Y	N	
Fire extinguishers in place	Y	N	
Safety precautions posted	Y	N	
Tank system secured to prevent vandalism and unauthorized use	Y	N	
Electrical connections & groundings are tight and maintained	Y	N	

Facility I.D.# _____ Inspection Completed By: _____ Date: _____

Comments: _____

SYMBOLS: Y-Yes, N-NO, A-Acceptable, U-Unacceptable
 File original form on site with SPC Plan. This form may be copied as needed.

APPENDIX D

**Drum and Small Container Storage and Handling Monthly Checklist
Form**

Drum & Small Container Storage and Handling Monthly Checklist Form

Facility: _____

Inspector: _____

Item to Inspect	Acceptable	Unacceptable	Corrective Action
Storage/work areas are free of spills/leaks	_____	_____	_____
Containers not leaking, rusted, or deteriorated	_____	_____	_____
Containers have closed lids or bung holes	_____	_____	_____
Incompatible materials are not stored together	_____	_____	_____
Containers are stored on impermeable surface with adequate space to inspect container	_____	_____	_____
Drip pans are used under spigots and free of liquid	_____	_____	_____
Spigots, pumps, hoses, valves are not leaking	_____	_____	_____
Containment areas are free of debris and liquid accumulations	_____	_____	_____
Containment/drainage structures are intact, with no cracks, breaches	_____	_____	_____
Emergency equipment is operational, complete	_____	_____	_____
Storage/handling equipment is properly used, in good condition	_____	_____	_____
Clean/orderly areas, adequate aisle space	_____	_____	_____
Containers are labeled	_____	_____	_____

INSPECTOR SIGNATURE

DATE

SUPERVISOR SIGNATURE

DATE

File original form on site with SPCC Plan. This form may be copied as needed.

APPENDIX E

Directions to Emergency Medical Facilities

DIRECTIONS TO MEDICAL FACILITIES

Medical:

Easton Hospital
250 South 21st Street
Easton, PA 18042-3892

(610) 250-4204

Directions:

Head southwest on PA-512 S toward Speer Avenue (1.8 mi). Turn left onto PA-512 S/N Broadway (1.1 mi). Continue straight onto PA-512 S (0.2 mi). Use the right lane to merge onto PA-33 S via the ramp to Easton/Bethlehem (0.2 mi). Merge onto PA-33 S (11.3 mi). Take the exit onto US-22 E toward Easton (2.3 mi). Take the 25th Street exit toward PA-248/Wilson (0.2 mi). Continue onto Wood Avenue (0.2 mi). Turn right onto Northampton Street (0.2 mi). Slight right onto Ferry Street (0.2 mi). Turn right onto S 22nd Street (0.2 mi). Turn left onto Lehigh Street (0.1 mi). Turn left onto S 21st Street (69 ft). The destination, Easton Hospital, will be on the left.



DIRECTIONS TO MEDICAL FACILITIES (CONT.)

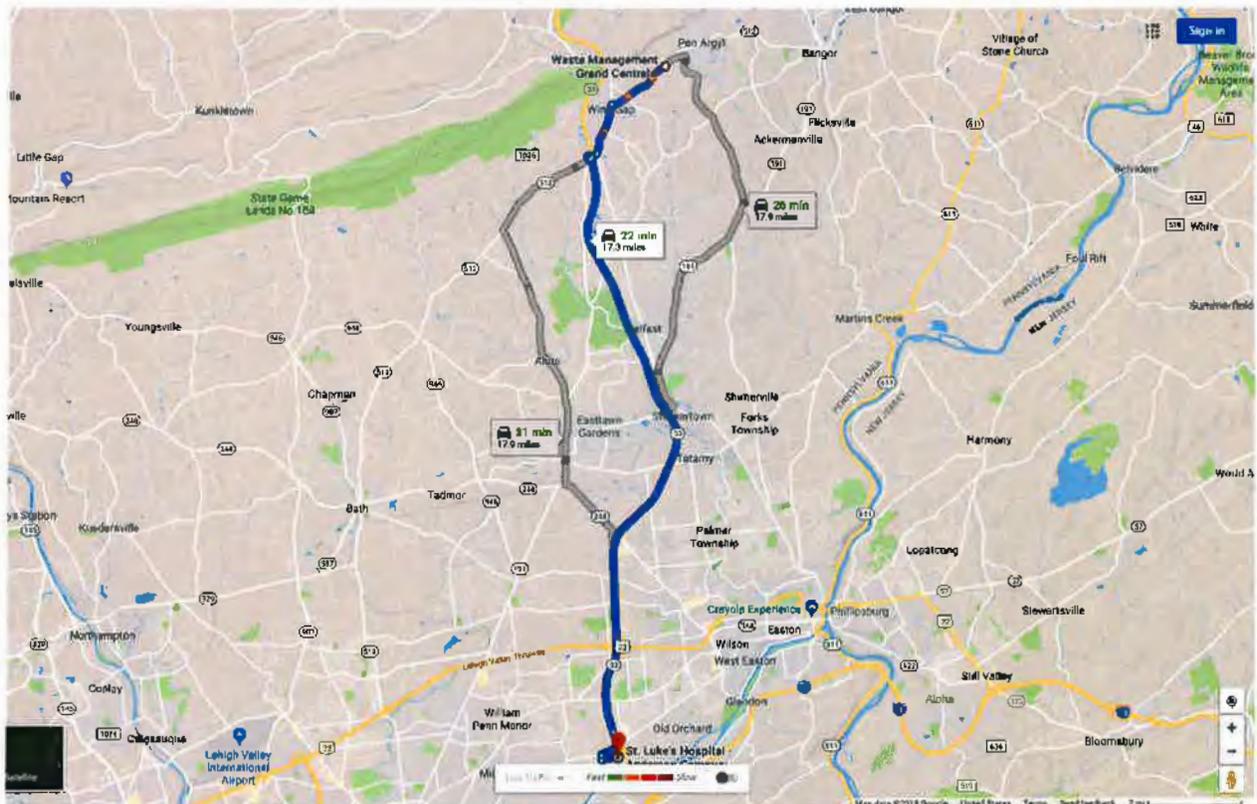
Medical:

St. Luke's Hospital – Anderson Campus
1872 St Luke's Blvd
Easton, PA 18045

(484) 503-3000

Directions:

Head southwest on PA-512 S toward Speer Avenue (1.8 mi). Turn left onto PA-512 S/N Broadway (1.1 mi). Continue straight onto PA-512 S (0.2 mi). Use the right lane to merge onto PA-33 S via the ramp to Easton/Bethlehem (0.2 mi). Follow PA-33 S to Freemansburg Ave in Bethlehem Township. Take the Freemansburg Ave exit from PA-33 S. Continued on Freemansburg Ave. Take Star Dr. to St Luke's Blvd.



DIRECTIONS TO MEDICAL FACILITIES (CONT.)

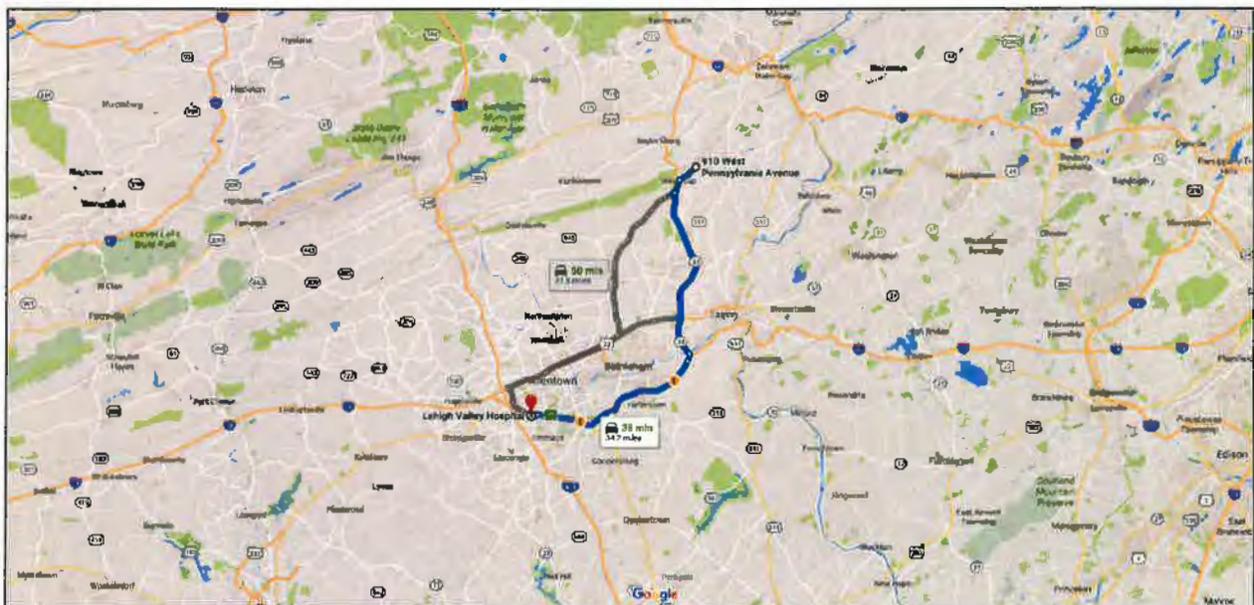
Medical:

Lehigh Valley Hospital
1200 South Cedar Crest Boulevard
Allentown, PA 18103

(610) 402-2273

Directions:

Head southwest on PA-512 S toward Speer Avenue (1.8 mi). Turn left onto PA-512 S/N Broadway (1.1 mi). Continue straight onto PA-512 S (0.2 mi). Use the right lane to merge onto PA-33 S via the ramp to Easton/Bethlehem (0.2 mi). Merge onto PA-33 S (14.6 mi). Use any lane to take the Interstate 78 W exit toward Allentown/Harrisburg (0.6 mi). Merge onto I-78 W (14.8 mi). Take exit 55 for PA-29/Cedar Crest Boulevard (0.3 mi). Turn left onto s Cedar Crest Boulevard (signs for Emmaus/PA-29 S) (0.3 mi). Turn right (0.1 mi). Turn left (0.2 mi). The destination, Lehigh Valley Hospital, will be on the right.



DIRECTIONS TO MEDICAL FACILITIES (CONT.)

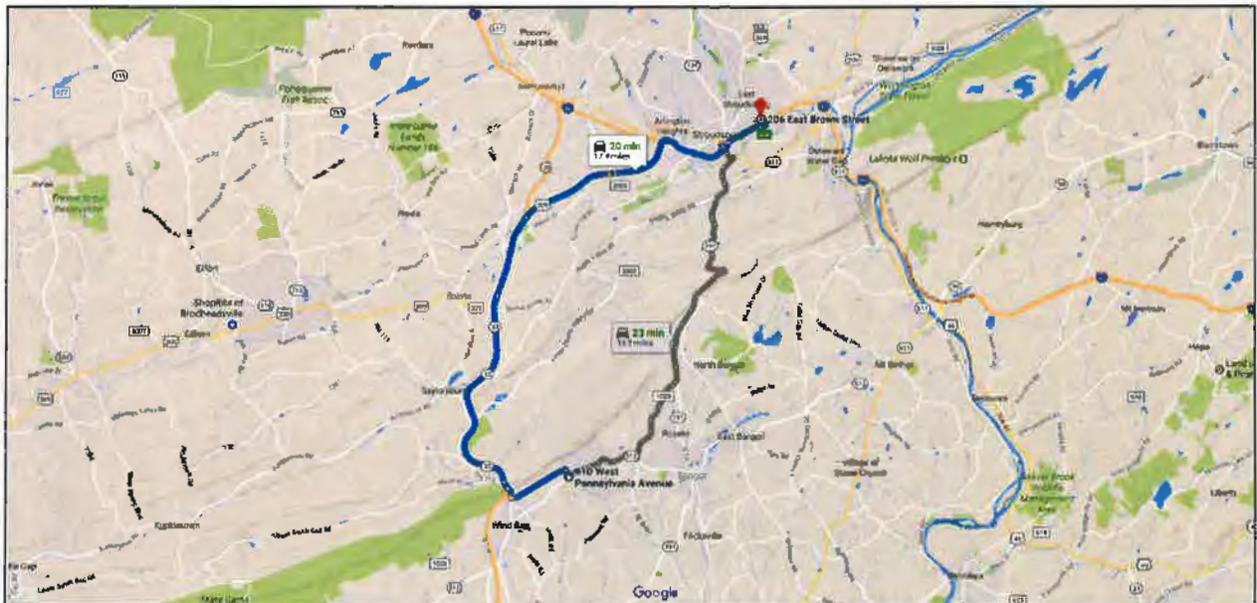
Medical:

Pocono Medical Center
206 East Brown Street
East Stroudsburg, PA 18301

(570) 421-4000

Directions:

Head southwest on PA-512 S toward Speer Avenue (59 ft). Turn right onto Speer Avenue (0.2 mi). Turn left onto Constitution Avenue (1.5 mi). Turn right onto N Broadway (0.3 mi). Slight right to merge onto PA-33 N (0.2 mi). Merge onto PA-33 N (5.6 mi). Continue onto PA-33 N/US-209 N (2.1 mi). Keep right to stay on US-209 N, follow signs for I-80 E/Stroudsburg (4.2 mi). Merge onto I-80 E/US-209 N (2.8 mi). Take exit 308 toward Stroudsburg (0.3 mi). Turn right onto Prospect Street (0.2 mi). Turn right onto E Brown Street (0.1 mi). The destination, Pocono Medical Center, will be on the left.



APPENDIX F

Forms, Reports and Correspondence

APPENDIX G

Standard Operating Procedures

*To be added upon completion of Facility Construction

APPENDIX H

Safety Data Sheets

***To be added upon completion of Facility Construction**

FORM R1
WASTE ANALYSIS AND CLASSIFICATION PLAN



FORM R1
WASTE ANALYSIS AND CLASSIFICATION PLAN
FOR PROCESSING FACILITIES AND BENEFICIAL USE

This form must be fully and accurately completed. All required information must be typed or legibly printed in the spaces provided. If additional space is necessary, identify each attached sheet as Form R1, reference the item number and identify the date prepared. The "date prepared/revised" on any attached sheets needs to match the "date prepared/revised" on this page.

SECTION A. SITE IDENTIFIER

Applicant/permittee: Slate Belt Heat Recovery Center, LLC

Site Name: Slate Belt Heat Recovery Center

Facility ID (as issued by DEP): TBD

**Slate Belt Heat Recovery Center, LLC
435 Williams Court, Suite 100
Baltimore, MD 21220**

**FORM RI
WASTE ANALYSIS AND CLASSIFICATION PLAN**

**Slate Belt Heat Recovery Center
Plainfield Township
Northampton County, PA**

Prepared: March 2018

Prepared By:



TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION.....	1
2.0 INBOUND BIOSOLIDS CHARACTERIZATION AND APPROVAL PROCESS	3
2.1 Waste Processing Description and Supplemental Operating Information.....	3
2.2 Site Characterization	4
2.3 Waste Approval by SBHRC.....	4
2.4 Shipment of Approved Waste Material	5
3.0 POST TREATMENT SAMPLING AND ANALYSIS	6
4.0 RECORDKEEPING AND REPORTING	7
5.0 QUALITY ASSURANCE/QUALITY CONTROL.....	8

Immediately following report

Tables

Table 1 List of PADEP Pollutant Concentration List

ATTACHMENTS

- Appendix 1 Drying Process Sampling Plan and Product Use
- Appendix 2 SOP:049A - Pellet Sampling and Analysis (All States)
- Appendix 3 SOP:049B - Fecal Coliform Sampling (All States)
- Appendix 4 SOP:049C - 503.13 Table 3 Metals Sampling (All States)

1.0 INTRODUCTION

Slate Belt Heat Recovery Center, LLC (SBHRC) will accept dewatered municipal biosolids, which will be transported to the proposed facility where they will be thermally dried to produce Class A biosolids which will be marketed as a fertilizer, soil conditioner, and/or renewable fuel product. The proposed project will also beneficially use biosolids that would otherwise be landfilled. The biosolids processing operations are described further in Section 2.0 of the Waste Processing Description and Supplemental Operating Information.

SBHRC has established the following Waste Analysis and Classification Plan (WACP or Plan) to ensure that the acceptance, processing and reuse of biosolids conform to the facility's General Permit. This Plan describes in detail the methods and procedures used to accurately characterize and manage material at the facility. The requirements of this Plan apply to all sources of inbound biosolids received at the Facility.

The WACP includes the following guidelines and controls for characterizing materials:

- Inbound biosolids source analytical data;
- Sampling methods;
- Notification requirements;
- Initial waste analysis and methods;
- Recordkeeping and reporting; and
- Quality Assurance and Quality Control Criteria

This WACP divides waste sampling, evaluation and analysis into three phases:

1. **Biosolids Characterization and Approval:** Sampling and analysis applies to those samples that are collected by the generator and reviewed prior to the issuance of an approval to ship the waste to the facility. An independent, state accredited or certified laboratory performs the sample analysis for pre-approval. If materials do not meet pre-approval criteria, the waste will not be approved for shipment to the site.
2. **Notification:** SBHRC will submit a notification to the Pennsylvania Department of Environmental Protection (PADEP or Department) Northeast Regional Office (NERO) of inbound biosolids that will be accepted at the facility along with a summary of the analysis that shows the material meets the pollutant concentration limits specified in 25 Pa. Code 271, Table 3.
3. **Post Treatment:** The facility has implemented quality assurance measures to confirm successful processing and treatment and verify that the product generated during the treatment process meet requirements of the beneficial use of exceptional quality biosolids in accordance with the requirements of General Permit PAG-07.

The purpose of the WACP is to stipulate pre-approval criteria for the evaluation and

classification of biosolids prior to acceptance and processing at the facility. These methods will assure that:

1. No unapproved or unauthorized wastes are accepted at the facility;
2. Biosolids received can be processed to the standards or specifications stipulated in the permit; and
3. The biosolids produced by the facility can be beneficially used in accordance with all relevant permits, regulations and authorizations.

2.0 INBOUND BIOSOLIDS CHARACTERIZATION AND APPROVAL PROCESS

2.1 Waste Processing Description and Supplemental Operating Information

Inbound material offloading is confined to the tipping pads where trailers empty biosolids into the covered receiving pit, trailers will remain on the truck tipper in order to accept/load process wastewater pumped from the above storage tank. A metered process wastewater fill station connects to the truck with positively sealed fittings and ensures fill volumes do not exceed the truck tank capacity.

The thermal drying process will consist of two (2) fully enclosed indirectly heated belt dryers in parallel, each with a capacity of approximately 200 wet tons per day, for a total throughput of 400 wet tons per day, 84 dry tons per day for biosolids (containing an average of approximately 21% solids).

The project location was chosen based on a desire to harness the currently unused heat source provided by the existing Green Knights Economic Development Corporation (GKEDC) landfill gas to energy (LFGTE) plant. The LFGTE plant specifically anticipated the future use of waste heat. The existing turbine stacks located at the LFGTE plant will be modified include heat exchangers that retain heat in a thermal oil which is routed for use in the drying process. These dryers can also be supplied heat via a supplemental thermal oil heater using natural gas or landfill gas. There will also be a supplemental thermal oil heater in the thermal oil loop, which can provide additional heat to the thermal oil for use in the dryers when GKEDC waste heat is below operational needs. The supplemental thermal oil heater will be fueled by using natural gas or landfill gas.

The dryers and all associated processing equipment will be enclosed and the process air system will operate under slightly negative pressure. A portion of the process air will be routed to a condenser for moisture removal, dust control and then it will be routed to a two-stage chemical scrubber, which is the facility odor control system.

Evaporated water from the drying process, removed in the condenser, will become process wastewater, along with wash down water and scrubber blowdown. Sanitary wastewater originating from office, restrooms and employee facilities will be discharged to the local publicly owned treatment works operated by the Pen Argyl Municipal Authority (PAMA) or otherwise removed for off-site disposal. There will be no process wastewater discharge into local waterbodies. Class A dried product is loaded into trailers under the product storage silos.

The proposed facility will operate continuously but the deliveries to the facility will be restricted to the same hours as the Grand Central Sanitary Landfill (GCSL).

2.2 Site Characterization

For inbound biosolids material to be accepted at the facility, generators must provide SBHRC with the following information:

- Identification of the origin of the biosolids.
- Estimated weight or volume of biosolids to be generated.
- Name, address and telephone number of the generator.
- A chemical analysis of the biosolids which will include the following: The date of the analysis.
- The name, address and telephone number of the analytical laboratory and a contact name.
- Sampling frequency.
- A description of the sampling method
- Test results as specified 25 Pa. Code Chapter §271.914 Table 3 (see Table 1)

Biosolids received from Public Owned Treatment Works (POTW's) or other facilities where the biosolids have been mixed with domestic sewage are exempt from the hazardous waste regulations, pursuant to 40 CFR §261.4. Any potential biosolids source not from a POTW will be required to provide a certification that, to the best of the generator's knowledge, the biosolid material generated at the site is not a hazardous waste, or in lieu of certification analytical testing to demonstrate the biosolid is not a hazardous waste as defined by under 40 CFR Part §261.

The generator must collect, or have collected, a representative sample(s) of the material, and have the samples(s) analyzed by a laboratory that complies with the Pennsylvania Accredited Laboratory Program. The laboratory must analyze each required parameter using the EPA approved methods specified in this WACP, or a comparable EPA approved method.

Generators will be required to follow acceptable sampling procedures when collecting, storing and preserving samples, such as those outlined in EPA's Hazardous Waste Test Methods / SW-846.

Should the generator not have the required information, SBHRC will secure the samples and provide for the analysis/reporting per the regulation.

2.3 Waste Approval by SBHRC

Once SBHRC receives all required information from the generator, the following procedures will be implemented:

- 1) SBHRC will review the information outlined above and to ensure that the analytical testing results demonstrate that the material meets the allowable concentrations in specified Table 1.
- 2) Once the material has been reviewed and verified that the material meets all

acceptance criteria, SBHRC will provide a notice to PADEP NERO that identifies the new inbound biosolids source and provides a summary of the analysis demonstrating that the limits specified in 25 Pa. Code Chapter §271, Table 3, have been met.

2.4 Shipment of Approved Waste Material

After completion of the waste characterization process, and PADEP approval of the inbound biosolids generators are then able to schedule and ship external biosolids to the facility, material accepted for processing as outlined below will be managed in accordance with the General Permit (PAG-07).

3.0 POST TREATMENT SAMPLING AND ANALYSIS

Material received and processed through the facility will be managed in accordance with the PADEP approval for Coverage under the General Permit (PAG-07) for Beneficial Use of Exceptional Quality Biosolids.

The post process sampling will comply with General Permit conditions and is performed according to the Drying Process, Sampling Plan and Product Use Plan (see Attachment 1). The processed biosolids derived product that is produced at the facility will also be tested for BTU content when the material may be used as a fuel. This material will be required to meet the standards for a coproduct, as defined in 25 Pa. Code §287.1. Accordingly, the minimum BTU content for use as a fuel must be at least 5,000 BTU/lb. Final product that does not meet this reuse threshold may still be land applied or may be blended with material that meets the threshold as necessary to facilitate reuse.

Materials to be land applied will undergo additional sampling and analysis procedures for determining solids and temperature as outlined in the SBHRC standard operating procedure (SOP) SOP:049-A found in Attachment 2 and the Standard Operating Procedure for Fecal Coliform sampling SOP:049-B in Attachment 3. In addition, any material to be land applied will also undergo metals sampling and analysis in accordance with the SBHRC Standard Operating Procedure for Metals Sampling SOP:049-C found in Attachment 4.

The above testing and analysis will demonstrate that treated material meets all regulatory requirements for use as a supplemental fuel or land application based on the actual end use.

4.0 RECORDKEEPING AND REPORTING

The following written records will be maintained at the SBHRC facility in accordance with PADEP requirements:

1. Up-to-date list of approved sources of biosolids.
2. Daily logs showing type, origin and volume of external biosolids received.
3. Records indicating weight and location of the end use of the material.

Copies of all permit applications, approved plans, laboratory data on biosolids approved for receipt and processing at the facility will be maintained on site. These records will be made available to the Department upon request.

5.0 QUALITY ASSURANCE/QUALITY CONTROL

Quality Assurance/Quality Control (QA/QC) procedures will be utilized by the facility to assure that information and data used in the context of the WACP is technically sound and accurate. The QA/QC procedures will be implemented at a frequency and in a manner that identifies problems and subsequent corrective actions.

The QA/QC program requires all outside laboratories used by generators to be qualified as previously described. Outside laboratories must utilize the test methods prescribed in the WACP or comparable method approved by the facility.

TABLE 1
POLLUTANT CONCENTRATION LIMITS

Slate Belt Heat Recovery Center, LLC

Table 1 – Pollutant Concentration Limits

Parameter	Method	Units (Dry Weight Basis)	PADEP Standards – 25 Pa. Code §271.914
			Table 3 Pollutant Concentration Limits
Metals			
Arsenic	SW 846 6010C	mg/kg	41
Cadmium	SW 846 6010C	mg/kg	39
Copper	SW 846 6010C	mg/kg	1,500
Lead	SW 846 6010C	mg/kg	300
Mercury	SW 846 7471A	mg/kg	17
Molybdenum	SW 846 6010C	mg/kg	75 ⁽¹⁾
Nickel	SW 846 6010C	mg/kg	420
Selenium	SW 846 6010C	mg/kg	100
Zinc	SW 846 6010C	mg/kg	2,800
Total PCBs			
Total PCBs	SW 846 8082A	mg/kg	4

Note:

(1) PADEP Standards, 25 Pa. Code §271.914 – Table 1 Ceiling Concentration Limits.

ATTACHMENT 1
DRYING PROCESS SAMPLING PLAN AND PRODUCT USE

Slate Belt Heat Recovery Center, LLC (SBHRC)

Granulite Fertilizer Drying Process, Sampling Plan and Product Use

Pathogen Reduction by Class A Alternative 1

Vector Attraction Reduction by Option 7

INTRODUCTION:

Slate Belt Heat Recovery Center, LLC (SBHRC) proposes to permit and construct a biosolids processing facility which will be sited on a parcel of land owned by Grand Central Sanitary Landfill (GCSL), and situated near Green Knights Economic Development Corporation (GKEDC) facilities in Plainfield Township, Northampton County, Pennsylvania (see Figure 1 – Site Location Map). The proposed property is currently two (2) lots, Tax Parcel No. E8-12-1 and Tax Parcel No. E8-12-1A, which will be adjusted from the 4.35 acre lot currently operated as the GKEDC, Tax Parcel No. E8-12-1A and create a new lot area containing 12.05 acres for the SBHRC.

SBHRC will accept dewatered municipal biosolids, primary/secondary blend, digested and undigested, which will be transported to the proposed facility where they will be dried to produce Class A biosolids that will be marketed as a fertilizer, soil conditioner, and renewable fuel product. The proposed project will also recycle biosolids by diverting approved biosolids from landfill disposal to a beneficial agricultural and biofuel use.

TREATMENT PROCESS:

Inbound material offloading is confined to the tipping pads where trailers empty biosolids into the covered receiving pit, trailers will remain on the truck tipper in order to accept/load process wastewater pumped from the above storage tank. A metered process wastewater fill station connects to the truck with positively sealed fittings and ensures fill volumes do not exceed the truck tank capacity.

The thermal drying process will consist of two (2) fully enclosed indirectly heated belt dryers in parallel, each with a capacity of approximately 200 wet tons per day, for a total throughput of 400 wet tons per day, 84 dry tons per day for biosolids (containing an average of approximately 21% solids).

The project location was chosen based on a desire to harness the currently unused heat source provided by the existing Green Knights Economic Development Corporation (GKEDC) landfill gas to energy (LFGTE) plant. The LFGTE plant specifically anticipated the future use of waste heat. The existing turbine stacks located at the LFGTE plant will be modified include heat exchangers that retain heat in a thermal oil which is routed for use in the drying process. These dryers can also be supplied heat via a supplemental thermal oil heater using natural gas or landfill gas. There will also be a supplemental thermal oil heater in the thermal oil loop, which can provide additional heat to the thermal oil for use in the dryers when GKEDC waste heat is

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below operational needs. The supplemental thermal oil heater will be fueled by using natural gas or landfill gas.

The dryers and all associated processing equipment will be enclosed and the process air system will operate under slightly negative pressure. A portion of the process air will be routed to a condenser for moisture removal, dust control and then it will be routed to a two-stage chemical scrubber, which is the facility odor control system.

Evaporated water from the drying process, removed in the condenser, will become process wastewater, along with wash down water and scrubber blowdown. Sanitary wastewater originating from office, restrooms and employee facilities will be discharged to the local publicly owned treatment works operated by the Pen Argyl Municipal Authority (PAMA) or otherwise removed for off-site disposal. There will be no process wastewater discharge into local waterbodies. Class A dried product is loaded into trailers under the product storage silos.

LABORATORIES

The laboratories listed in this Plan are those used at the time this Plan was prepared. SBHRC may use different Pennsylvania certified laboratories in the future.

SAMPLING

1) Pollutants (Metals/PCB's):

Once the biosolids pass through the drying process as described above, samples are collected. A plastic sample cup is used to collect a 4 oz. gravity drop sample (from each running train), every four (4) hours, at the discharge chute (just before the pellets are conveyed to the silo for storage). This sample (4 oz.) is placed in the designated container to form a 5 day monthly composite sample. After five days, the sample is mixed (using a stainless steel metal sampling trowel) and a 16 oz. (500 ml) representative sample is collected in a plastic bottle (provided by the contract laboratory) to form the monthly composite. These samples are sealed and sent to the following Pennsylvania certified lab:

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A&L Eastern Laboratories, Inc.
7621 Whitepine Road
Richmond, VA 23237
Contact: Pauric McGroary
(804) 743-9401

The sample is analyzed for the following parameters:

EPA 6010	Aluminum
EPA 7061A	Arsenic
EPA 6010	Beryllium
EPA 6010	Cadmium
EPA 6010	Calcium
EPA 6010	Chromium
EPA 6010	Copper
EPA 6010	Iron
EPA 6010	Lead
EPA 6010	Magnesium
EPA 6010	Manganese
EPA 6010	Molybdenum
EPA 6010	Nickel
EPA 6010	Potassium
EPA 6010	Selenium
EPA 6010	Zinc
EPA 6010	Phosphorous
SM 2540G	Percent Solids
SM 2540G	Percent Volatile Solids
Calculation	Water Soluble Nitrogen
SM 4500-CL	Chloride
SM-4500-NH3C	Total Kjeldahl Nitrogen (TKN)
EPA 350.2	Ammonia-nitrogen
SM-4500N03F	Nitrate-nitrogen
SW-90450	pH
EPA 6010	Boron
SW 846-7471	Mercury
ASTM 05865	BTU Content (for fuel use)

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In addition to the 5 day monthly composite described above, a composite sample (consisting of 7 grab samples taken from the same truck) will be collected once per quarter. This sample of the finished product (after dust suppressant has been applied at the truck load out area} will be sent to a Pennsylvania certified lab and will be analyzed for the following Table 3 metals to confirm continued compliance with Table 3 metals limits:

Arsenic
Cadmium
Copper
Lead
Mercury
Molybdenum
Nickel
Selenium
Zinc

All of the analytical methods utilized by A&L Eastern Laboratories are described on the analysis results.

The laboratory results for metals must not exceed the following pollutant limits (on a dry weight and monthly average basis):

Arsenic	41 mg/kg
Cadmium	39 mg/kg
Copper	1,500 mg/kg
Lead	300 mg/kg
Mercury	17 mg/kg
Molybdenum	75 mg/kg
Nickel	420 mg/kg
Selenium	100 mg/kg
Zinc	2,800 mg/kg

The lab results from A&L Eastern Laboratories will be used to certify compliance with the pollutant concentrations as listed in Title 25 Pa. Code §271.914(b)(3) (Table 3, Pollutant Concentrations).

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Granulite Fertilizer Drying Process, Sampling Plan and Product Use

Pathogen Reduction by Class A Alternative 1

Vector Attraction Reduction by Option 7

A sample will also be taken from this monthly five day composite to be analyzed for PCB's. This 8 oz. (250 ml) sample will be collected and put into a separate 250 ml Amber wide mouth jar with Teflon lid and sent to the following Pennsylvania certified laboratory:

Suburban Water Testing Laboratories, Inc.
4600 Kutztown Road
Temple, PA 19560
Contact: Sara Stump
(800) 433-6595

The laboratory will utilize the following analytical method:

EPA 8082 PCB's

The laboratory results for PCB's must not exceed the following Pennsylvania dry weight regulatory limit for PCB's:

PCB's 4 mg/kg

2) Fecal Coliform (Pathogen Reduction):

The pellets at the SBHRC will meet Class A pathogen reduction through Pennsylvania Regulations §271.932 (a)(3) - Class A Alternative 1. The microbiological portion of Class A Alternative 1 - §271.932 (a)(3)(i) is met by testing the pellets during one sampling event per month (event includes 7 samples) for fecal coliform and the density of the fecal coliform in each of the seven samples of the pellets must be less than 1,000 MPN/g of total solids (dry weight basis).

The samples are taken as gravity drop grab samples after the screening, which is just before the pellets go into the silo for storage. The samples are taken in a sterile 4 oz. container with a screw top. During the monthly sampling event, 7 samples are collected approximately 15 minutes apart. They are shipped to the laboratory for analysis at 4 degrees Celsius with a maximum transport time to the laboratory of 6 hours and then processing by the laboratory within 2 hours of receipt. The samples will be sent to the following Pennsylvania certified lab:

Slate Belt Heat Recovery Center, LLC (SBHRC)

Granulite Fertilizer Drying Process, Sampling Plan and Product Use

Pathogen Reduction by Class A Alternative 1

Vector Attraction Reduction by Option 7

Suburban Water Testing Laboratories, Inc.
4600 Kutztown Road
Temple, PA 19560
Contact: Sara Stump
(800) 433-6595

The analytical method used by the laboratory is as follows:

SM 9221 E Fecal Coliform

No material is to be stored at the facility for more than 90 days. If, at any time, material is stored for more than 90 days, that material must be re-sampled and tested for fecal coliform before distribution.

3) Pellet Time and Temperature (Pathogen Reduction):

Class A Alternative 1 Pathogen Reduction Criteria

The 40 CFR Part §503 and Title 25 Pa. Code Chapter §271 requirements for meeting Class A Pathogen Reduction by Alternative 1 Regime (B) are as follows:

The temperature of the wet feed that is used or disposed shall be maintained at a specific value for a period of time. When the percent solids of the wet feed is $\geq 7\%$ and small particles of wet feed are heated by either warmed gases or an immiscible liquid, the temperature of the wet feed shall be 50 degrees Celsius or higher; the time period shall be 15 seconds or longer; and the temperature and time period shall be determined using equation (2) shown below.

$$D = \frac{131,700,000}{10^{.14t}} \quad \text{where;} \quad \begin{array}{l} D = \text{time in days} \\ t = \text{temp in } ^\circ\text{C} \end{array}$$

Components of the Alternative 1 Regime B Formula

The two components of the Regime B Formula are: 1) retention time of the solids in the dryer and 2) the temperature of the solids in the dryer. The higher the temperature of the solids, the shorter the required retention time of the solids in the dryer.

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Retention Time Compliance Verification and Recordkeeping:

On the Programmable Logic Controller (PLC) Human Machine Interface (HMI) in the control room the screen named Overview shows the entire system. The Operator will verify the "Feed Rate" and the "Feed Ratio". The Feed Rate will provide the speed or % of the cake pumps and the Feed Ratio will be multiplied by the Feed Rate to give the Dry product total which will be cross-referenced with the dryer retention chart. All these variables are stored, using an Historian program and can be recalled anytime in the future.

The Operator will record the Feed Rate and Feed Ratio on a Dryer Retention Time and Pellet Temperature Log three times per shift per train when the train is operational. The Operator will also use the Dryer Retention Chart and confirm that the process is in compliance by using the calculator and inserting the Feed Rate and Recycle Feed volumetric flows and then logging the retention time in the dryer on the Dryer Retention Time and Pellet Temperature Log three times per shift per train when the train is operational.

Temperature Component

At the SBHRC Facility when a drying train is operating the temperature of the pellets is manually measured once every 4 hours. A tube with a thermometer inside of it is inserted into a temperature port located at the outlet of the dryer. The tube is filled with product exiting the dryer and the temperature of the product is recorded on the Dryer Retention Time and Pellet Temperature Log. The facility is equipped with thermometers, which are strategically placed within the system, to control air temperature of the air that comes in direct contact with the pellets. There is also a thermocouple in contact with the pellets at the outlet of the dryer that measures pellet temperature. These readings can be monitored through computer readouts located in the control room of the facility. If, at any time, a temperature reading is less than 80 degrees Celsius or 176 degrees Fahrenheit (on either the continuous or manual temperature monitoring systems), the valve to the storage silo is closed and the material is recycled back through the system and passes through the dryer again. The valve is re-opened when a temperature reading of 80 degrees Celsius (176 degrees Fahrenheit) or greater is recorded manually.

Analysis of the Retention Time and Temperature Components

Using the Class A Alternative 1 Regime B Formula (i.e. Equation 2 presented earlier in this document) and a pellet temperature of 80 degrees Celsius (176 degrees Fahrenheit) the biosolids

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must be retained in the dryer drum for at least 72 seconds or 1.2 minutes. The required retention times for biosolids at various temperatures can be determined using Regime B formula.

Historic pellet temperature monitoring shows the PRB minimum pellet temperatures are consistently above 80 degrees Celsius (176 degrees Fahrenheit), so this, in combination with the Andritz information showing a biosolids retention time of 29.62 minutes, demonstrates that the SBHRC dryers achieve the Class A Alternative 1 time and temperature requirements.

4) Percent Solids (Vector Attraction Reduction):

The percent total solids lab results from the monthly metals and fecal coliform testing programs will be used to certify compliance with the VAR requirements specified in Title 25 Pa. Code §271.933(b)(7) - (i.e. $\geq 75\%$ solids).

The 5 day monthly composite sample collected for metals and nutrient testing and the seven grab samples collected each month for fecal coliform testing are analyzed by Pennsylvania laboratories certified to test Total Solids by Standard Method SM 2540 G. Currently A&L Eastern Laboratories, Inc. analyzes the 5 day monthly composite sample and Suburban Water Testing Laboratory analyzes the seven fecal coliform samples.

In addition to the above testing, on-site process monitoring percent solids testing is performed at the SBHRC drying facility. A plastic sample cup is used to collect a 4 ounce gravity drop sample (from each running train), once every eight hours of dryer operation, at the pellet cooler inlet. The Standard Operating Procedure SOP: 049-0H provides details on sample collection and on-site percent solids analysis.

Percent solids readings from the on-site solids testing must be ≥ 75 percent. If, at any time, a solids reading is less than 75 percent, the valve to the storage silo is closed and the material is recycled back through the system and passes through the dryer again. The valve is re-opened when a solids reading of 75 percent or greater is recorded.

DISTRIBUTION

Pellets produced at the SBHRC Facility will be marketed under the trade name "Granulite" as either bulk or bagged fertilizer product. The product is registered with the Pennsylvania Department of Agriculture as a commercial fertilizer product and subject to the annual reporting requirements of the Department of Agriculture.

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Vector Attraction Reduction by Option 7

LABELING

A product information label will be distributed to all blenders or individuals who receive Granulite directly.

ENVIRONMENTAL AND PUBLIC PROTECTION

Typical environmental concerns associated with the beneficial use of municipal biosolids include pathogen transmission, trace metal build-up in the soil and food chain, and preservation of water quality. The product preparation and label instructions which will accompany the product minimize these concerns.

At the SBHRC Facility, the granulite pellets produced by the drying process meet Class A Pathogen Reduction through Class A Alternative 1 (meet Class A criteria for pellet retention time and temperature within the dryer) and are ≥ 75 % solids to meet the vector attraction reduction requirements. The biosolids exiting the dryer meet pathogen and vector attraction reduction requirements and contain the same metals as the dewatered material. According to state and federal regulations, this material therefore poses minimal risk to human health and the environment when used according to the label instructions.

The label provides instructions and application rates based on the nitrogen content of the material. Whether used straight or blended with other fertilizer materials, the dried pellets slowly mineralize and pose minimal risk to surface or groundwater resources when used according to the label directions.

ATTACHMENT 2

SOP:049A – PELLET SAMPLING AND ANALYSIS (ALL STATES)

Standard Operating Procedure

Pellet Sampling and Analysis (All States)

I. Purpose

The purpose of this procedure is to establish a system and identify instructions for specifying requirements in sample collection, analysis and reporting.

II. Scope

This procedure must comply with regulations set forth by US EPA (40 CFR Part 136, and Part 503) and the State Regulations and Permits for the States where the pellets are being distributed.

III. Application

This procedure applies to the Percent Total Solids content and Temperature of PRBF's end product, pelletized biosolids.

IV. Equipment

The following equipment will be used for the required tests.

1. **Oven:** Quincy Lab model 30 GC Lab Oven
2. **Balance:** AND Company Ltd model FX-120i Max 22g D=0.001
3. **Oven Thermometer:** 76mm immersion Made in Germany
4. **Calibration Thermometer:** H-B Instrument Company traceable to NIST and DKD/PTB. Ref# FD611, Report# 333340, Serial# M78100, P/N 00708-02.

V. Responsibility

The Dryer Operations Manager is responsible for ensuring that samples are collected, analyzed, and recorded in accordance with applicable regulations and requirements. The Dryer Operations Manager also serves as the Laboratory Manager.

Standard Operating Procedure

Pellet Sampling and Analysis (All States)

VI. Procedure

A. Sample Collection

1. Once every 8 hours, collect a grab sample of pellets from the Pellet Cooler inlet drop chute of each running train.

B. Total Solids Analysis

1. Dry sample pan in 103° - 105 ° C oven for 1 hour. Remove and place in desiccator to cool.
2. Remove a new sample pan from desiccator, weigh the empty pan (grams).
3. Once the weight is stable, record it on the lab sheet (bowl weight).
4. Remove empty pan from scales and add pellets to be sampled to pan (try to add at least 20 grams of sample).
5. Weigh full sample pan and record on lab sheet (total weight).
6. Deduct the bowl weight from the total weight and record (sample weight).
7. Place sample in drying oven for two (2) hours.
8. After two hours remove sample and place in desiccator for 20 -30 minutes to allow the sample to cool.
9. Weigh cooled sample.
10. Repeat cycle of heating, cooling, dessicating and weighing until weight change is less than 4% or 50mg., whichever is less.
11. Once a constant weight is determined record on lab sheet (dry weight). Deduct bowl weight from dry weight and record (material weight).
12. Calculate percent solids using following formula: Material weight (converted to mg.) x 100 / sample weight = percent solids. Record on log sheet.

Standard Operating Procedure

Pellet Sampling and Analysis (All States)

C. Temperature Sampling

1. Temperature sampling will be done at the Pre-Separator hopper.
2. Remove the plug in the access pipe.
3. Insert the calibrated thermometer thru the access pipe into the pellet hopper.
4. Allow thermometer to come up to temperature.
5. Record temperature shown on thermometer in Deg F.
6. Remove thermometer and replace plug.

D. Sample Frequency

1. Temperature samples shall be collected once every 4 hours from each running Dryer train
2. Sample analysis for Total Solids, shall be performed once every 8 hours.

E. Sample Analysis

1. Sample should be prepped for analysis within 15 minutes of collection time.
2. Sample is to be analyzed using Standard Methods SM 2540 G as required by the US EPA, SM 18111 Ed.

F. Sample Reporting

The plant laboratory will record the results in an on-site log book, the Standard Method used, the time the sample was taken, the time of the analysis, tech that took sample and the tech that performed the test.

Standard Operating Procedure

Pellet Sampling and Analysis (All States)

VII. Calibrations

- A.** Thermometer calibrations will be done quarterly and annually depending on thermometer type.
1. Turn sample oven on and set temperature for 1000c.
 2. Place reference thermometer into vent port on top of oven. Make sure oven racks do not come into contact with thermometer.
 3. Place thermometer to be calibrated into one of the other oven vent holes.
 4. Allow thermometers to stabilize.
 5. Convert Deg. F to Deg. C and record Temperature shown in the log. Both the reference thermometer and the thermometer that is being calibrated.
 6. Remove Thermometer from oven and allow to cool.
 7. Store Thermometer in safe location.
- B.** Daily Oven temperatures must also be recorded on a daily basis.
1. Insert calibrated glass thermometer in the top of oven.
 2. Insure oven is turned on and at temperature.
 3. Allow thermometer to stabilize.
 4. Record Temperature shown in log.

VIII. Quality Control

- A.** Balance must be calibrated on a monthly basis and the results recorded.
- B.** Balance must be certified annually.

Standard Operating Procedure

Pellet Sampling and Analysis (All States)

- C.** Every 20 samples a duplicate solids sample must be tested and the results recorded on the log sheet.
- D.** If on-site lab Total Solids results will be used to certify compliance for pellets distributed in New Jersey then the on-site lab must pass an annual PT for TS. Results must be submitted to PA DEP.
- E.** Every 20 samples a duplicate temperature sample must be taken and the results recorded on the log sheet.

ATTACHMENT 3

SOP:049B – FECAL COLIFORM SAMPLING (ALL STATES)

Standard Operating Procedure

Fecal Coliform Sampling (All States)

I. Purpose

The purpose of this procedure is to establish a system and identify instructions for specifying requirements in sample collection, analysis and reporting.

II. Scope

This procedure must comply with regulations set forth by US EPA (40 CFR Part 503, Part 136), and the State Regulations and Permits for the States where the pellets are being distributed.

III. Application

This procedure applies to the Fecal Coliform analysis of PRBF's end product, pelletized biosolids.

IV. Responsibility

The Dryer Operation Manager is responsible for ensuring that samples are collected, packaged, shipped, analyzed, and reported in accordance with applicable regulations and requirements.

V. Procedure

A. Sample Collection

1. Using a sterile 4oz. screw top container, collect a sample of pellets from the Pellet Cooler inlet every 15 minutes until a total of 7 separate samples are collected.
2. Note time, date and Dryer train number on the each sample container label.
3. Place the sample in the Desiccator with the lid off.
4. Fill out chain of custody form completely.
5. Remove samples from Desiccator and secure lid to top when Suburban Labs is on site. Suburban Labs will pick up samples and deliver them to their lab within the 6 hour holding time.

Standard Operating Procedure

Fecal Coliform Sampling (All States)

6. Give the completed Chain of Custody to the Suburban driver along with the collected samples.
7. Suburban Water Testing Labs will transport samples to lab for analysis within 6 hours of collection and initiate the testing within 2 hours of sample receipt.

B. Sample Frequency

1. Once per calendar month, a total of 7 grab samples shall be collected once every 15 minutes until all 7 samples have been collected.
2. Samples shall be picked up by Suburban Water Testing Labs at the facility and must accommodate the 6 hour holding time requirement.

C. Sample Analysis

1. Samples should be prepped for analysis within 2 hours of receipt as per US EPA Federal Register Part III Volume 72, Number 57 from March 26, 2007 regarding 40 CFR Parts 136 and 503.
2. The laboratory must be certified as applicable based on the State(s) where the pellets will be distributed.
3. Samples are to be analyzed using Standard Methods (SM) 9221E or another approved method in 40 CFR Parts 503 or 136.

D. Sample Reporting

The laboratory is to produce reports detailing the results in MPN/gram of solids dry weight basis, the sample method used, the time the samples were taken (taken from the chain of custody), and the time the sample analysis was started (when each sample was prepped).

ATTACHMENT 4

SOP:049C – 503.13 TABLE 3 METALS SAMPLING (ALL STATES)

Standard Operating Procedure

503.13 Table 3 Metals Sampling (All States)

I. Purpose

The purpose of this procedure is to establish a system and identify instructions for specifying requirements in sample collection, analysis and reporting.

II. Scope

This procedure must comply with regulations set forth by US EPA (40 CFR Part 136, and Part 503) and the State Regulations and Permits for the States where the pellets are being distributed.

III. Application

This procedure applies to the Pollutant Concentrations analysis of PRBF's end product, pelletized biosolids. Pollutant Concentrations are detailed in 40 CFR 503.13 Table 3.

IV. Responsibility

The Dryer Operations Manager is responsible for ensuring that samples are collected, packaged, analyzed, and reported in accordance with applicable regulations and requirements.

V. Procedure

A. Sample Collection

1. Using a plastic sample cup, collect a 4 oz. grab sample of pellets from the Pellet Cooler inlet of each running train.
2. Pour grab samples in the designated monthly pellet composite jar.
3. At the end of the sample week (5 running days), thoroughly mix the Train 1 and Train 2 samples in the monthly pellet composite container and take a 500 ml grab sample from the mix.
4. Place the grab sample in a new 500ml plastic bottle and appropriately label the bottle.
5. Fill out chain of custody form completely.
6. Pack sample in cooler with ice packs.

Standard Operating Procedure

503.13 Table 3 Metals Sampling (All States)

7. Secure the cooler with packing tape. Place cooler in shipping box and secure shipping box with packing tape.
8. Deliver cooler with the COC to the admin assistant for overnight delivery to the lab.
9. A second grab sample will be taken from the monthly Pellet composite and placed in a 250 ml amber jar. This jar will be labeled with the Suburban label for PCB testing. It will be picked up with the monthly pellet samples for fecal coliform analysis.

B. Sample Frequency

1. Grab samples shall be collected once every four hours from each running train and composited with samples from the same train during each monthly composite sampling event.
2. 503.13 sample analysis shall be performed monthly on a composite sample collected over 5 days of continuous operating. Samples will be sent out on the sixth day.

C. Sample Analysis

1. Sample should be prepped for analysis by the contract lab within 48 hours of receipt.
2. The laboratory must be certified as applicable based on the State(s) where the pellets will be distributed.
3. Samples are to be analyzed using approved methods in 40 CFR Parts 503 or 136.

D. Sample Reporting

The laboratory is to produce reports detailing the results on a dry weight basis, the sample method used, and the date the sample was received.

SECTION 3.0
BOND CALCULATIONS

**BONDING WORKSHEETS
FOR
WASTE PROCESSING FACILITIES**

Revised August 30, 2001

Date Prepared

March 2018

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

I.D. Number

**BONDING WORKSHEET A
WASTE PROCESSING DECONTAMINATION**

How do I start? Select a likely "worst case" scenario where you would have a maximum amount of the facility open and in need of closure. Provide a description of the scenario with references to site development stages:

400 tpd biosolids processing facility, assumed to have full receiving units, full dryer belts, and full wastewater storage tank that must be cleared and cleaned. Supporting documentation for the bond calculations is provided on the attached worksheets.

- | | | |
|--|----------|---------------------------|
| 1. Maximum volume of waste to be removed from storage, tipping floor and equipment.: | _____ | CY |
| 2. Unit cost to dispose of waste off-site (this should include, but not be limited to removal, transportation and disposal costs). | _____ | \$/CY |
| 3. Volume of pipes, lines and equipment of the total processing system to be decontaminated | _____ | CY |
| 4. Unit cost to decontaminate equipment. | _____ | \$/CY |
| 5. Area of exposed surfaces to be decontaminated (this should include but not be limited to tipping floor, walls, etc.) | _____ | sq. ft. |
| 6. Unit cost to decontaminate surfaces. | _____ | \$/sq. ft. |
| 7. Volume of waste generated during decontamination. | _____ | CY |
| 8. Unit cost to dispose of decontamination wastes | _____ | \$/CY |
| 9. Number of verification samples needed to verify decontamination. | _____ | 1 (lump sum) |
| 10. Unit cost to sample, analyze and report results (this should include any transportation and/or shipping costs) | _____ | \$5,000 (total) \$/sample |
| 11. Estimate volume of process residuals (wastewater, etc.) | _____ | CY |
| 12. Cost for facility maintenance: | _____ | \$10,000 LS |
| 13. Engineering and QA/QC costs | _____ | \$15,250 LS |
| 14. Cost Summary | | |
| a. Waste Removal (line 1 x line 2) | \$ _____ | 149,533 |
| b. Equipment decontamination (line 3 x line 4) | \$ _____ | 16,000 |
| c. Surface decontamination (line 5 x line 6) | \$ _____ | |
| d. Decontamination waste disposal (line 7 x line 8) | \$ _____ | |
| e. Sampling and analysis (line 9 x line 10) | \$ _____ | \$5,000 |
| f. Process residual disposal (line 11 x line 8) | \$ _____ | |
| g. Maintenance (line 12) | \$ _____ | \$10,000 |
| h. QA/QC (line 13) | \$ _____ | \$15,250 |

Total \$ 195,783

(Place this total on Summary Cost Worksheet - line 1)

Date Prepared

March 2018

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

I.D. Number

**BONDING WORKSHEET B
SURFACE WATER MONITORING**

Solid Waste Surface Water Sampling

- | | | |
|--|-------|----------|
| 1. Number of surface points monitored for Solid Waste Permit | _____ | |
| 2. Unit cost to sample a surface point (record keeping and shipping) | _____ | \$/point |
| 3. Unit cost to analyze sample(s) | | |
| a. Quarterly (25 PA Code §283.233) | _____ | \$/point |
| b. Annually (25 PA Code §283.233) | _____ | \$/point |
| 4. Unit cost to analyze data (includes review of lab QA/QC data, database input, form completion, and data review) | _____ | \$/point |
| 5. Cost to sample and analyze: quarterly (line 2 + line 3a + line 4) | _____ | \$/point |
| 6. Cost to sample and analyze: annually (line 2 + line 3b + line 4) | _____ | \$/point |
| 7. Number of years of sampling (_____ + time to close) | _____ | years |

NPDES Surface Discharge Sampling

- | | | | |
|--|-----------------|----------------|----------------|
| 8. Number of outfalls monitored | _____ | 1 | |
| 9. Monitoring frequency (i.e. monthly, quarterly, etc) | _____ | Semi-annual | |
| 10. Number of samples to be taken per point/year | _____ | 2 | |
| 11. Unit cost to sample a surface point (record keeping and shipping) | _____ | \$1,000 | \$/point |
| 12. Unit cost to analyze sample(s) (including data review and completing DMR) | _____ | \$250 | \$/point |
| 13. Number of years of sampling (1 + time to close) | _____ | 1 | years |
| 14. Cost Summary –Surface Water Monitoring | | | |
| a. Cost of Quarterly Surface Water Monitoring (line 1 x “4” x line 5 x line 7) | \$_____ | | |
| b. Cost of Annual Surface Water Monitoring (line 1 x line 6 x line 7) | \$_____ | | |
| c. Cost of NPDES Monitoring (line 8 x line 10 x [line 11 + line 12] x line 13) | \$_____ | \$2,500 | |
| d. NPDES renewals (includes application development, fees, etc.) use 10% of line 14c | \$_____ | \$250 | |
| | Subtotal | \$_____ | \$2,750 |

Adjustment for resampling, assessments, etc.

- a. Use 0% of subtotal if no assessments in last 2 yrs.
- b. Use 5% of subtotal if assessment in last 2 yrs.
- c. Use 10% if in assessment, abatement or increased monitoring

\$ _____ 0

Total \$ **\$2,750**

(Place this total on Summary Cost Worksheet – line 2)

Date Prepared

March 2018

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 BUREAU OF WASTE MANAGEMENT

I.D. Number

**BONDING WORKSHEET C
 GROUNDWATER MONITORING SYSTEM**

1. Number of wells in the approved monitoring plan. _____ **N/A**
 - a. Shallowest well depth _____ ft.
 - b. Deepest well depth _____ ft.
 - c. Average well depth _____ ft.
 - d. Number with dedicated pumps _____
2. Unit cost to upgrade a well with a dedicated pump _____ **\$/well**
3. Unit cost to install a well ((including, drilling, installation, developing and pump installation) _____ **\$/well**
4. Number of wells to be installed (wells in the approved plan that haven't been installed) _____
5. Number of wells to be replaced over the life of the monitoring period (use 10% of line 1 and round up) _____
6. Number of pumps to be replaced/repared (use 25% of line 1 over the monitoring period) _____
7. Unit cost to purge and sample a well (include methane monitoring, record keeping and shipping) _____ **\$/well**
8. Unit cost to analyze sample(s)
 - a. Quarterly (25 PA Code §283.233) _____ **\$/well**
 - b. Annually (25 PA Code §283.233) _____ **\$/well**
9. Unit cost to analyze data (includes review of lab QA/QC data, database input, form completion, statistical analysis and data review) _____ **\$/well**
10. Cost to purge, sample and analyze: quarterly (line 7 + line 8a + line 9) _____ **\$/well**
11. Cost to purge, sample and analyze: annually (line 7 + line 8b + line 9) _____ **\$/well**
12. Number of years of sampling (_____ + time to close) _____ **years**

13. Cost Summary –Groundwater Monitoring System

- a. System upgrade ([line 1 – line 1d] x line 2) \$ _____
- b. Wells to be Installed (line 3 x line 4) \$ _____
- c. Wells to be replaced (line 3 x line 5) \$ _____
- d. Pumps to be replaced (line 2 x line 6) \$ _____
- e. Cost of Quarterly Monitoring
(line 1 x "4" x line 10 x line 12) \$ _____
- f. Cost of Annual Monitoring
(line 1 x line 11 x line 12) \$ _____

Subtotal \$ _____

Adjustment for resampling, assessments, etc.

- a. Use 0% of subtotal if no assessments in last 2 yrs.
- b. Use 5 % of subtotal if assessment in last 2 yrs.
- c. Use 10% if in assessment, abatement or increase monitoring \$ _____

Total \$ _____ **0**

(Place this total on Summary Cost Worksheet – line 3)

Date Prepared

March 2018

COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF ENVIRONMENTAL PROTECTION
 BUREAU OF WASTE MANAGEMENT

I.D. Number

**BONDING WORKSHEET D
 OTHER MONITORING AND REPORTING**

Please list the annual costs to maintain the following permits/registrations that apply. Additional space is provided for items applicable to your facility, but not listed.

- | | |
|---|---------------------------|
| 1. Title V or other air permit (include the annual permit fee, cost to complete emissions inventory and emissions fees) | \$ <u> 3,500</u> |
| 2. NSPS Annual Report preparation cost | \$ <u> 0</u> |
| 3. Solid Waste Annual Report preparation cost | \$ <u> 2,000</u> |
| 4. Local permit or Host Agreement requirements | \$ <u> 0</u> |
| 5. UST/AST registration | \$ <u> 500</u> |
| 6. Other _____ | \$ _____ |
| 7. Other _____ | \$ _____ |
| 8. Other _____ | \$ _____ |
| 9. Other _____ | \$ _____ |
| 10. Other _____ | \$ _____ |
| 11. Number of years of monitoring/maintenance
(<u>1</u> + time to close) | <u> 1</u> years |

Total (sum of lines 1 to 10 x line 11) \$ 6,000
 (Place this total on Summary Cost Worksheet – line 4)

Date Prepared

March 2018

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

I.D. Number

**BONDING WORKSHEET E
SUMMARY COST WORKSHEET****Cost Summary – Waste Processing**

1. Decontaminating the Facility	\$	<u>195,783</u>
2. Surface Water Monitoring	\$	<u>2,750</u>
3. Groundwater Monitoring	\$	<u>0</u>
4. Other Monitoring	\$	<u>6,000</u>
5. Other Costs ¹	\$	<u> </u>
	Subtotal	\$ <u>204,533</u>

Inflation

6. Inflation rate (projected inflation for the next three years based on the inflation for the prior three years).		<u>1.73%</u>
7. Inflation cost for facility (subtotal x line 6)	\$	<u>3,538</u>

Contingency and administrative fees

8. Administrative fees (10%) (subtotal x 0.1)	\$	<u>20,453</u>
9. Contingency fee amount (subtotal x rate of contingency fee from Table 1)	\$	<u>25,567</u>

Total (subtotal + line 7 + line 8 + line 9) **\$ 254,091**

¹ You should include any costs that would be incurred by the Department, but were not included in these sheets. Provide separate sheets for documentation.

CALCULATIONS

SLATE BELT HEAT RECOVERY CENTER, LLC
BONDING CALCULATIONS WORKSHEET

1. MATERIAL QUANTITIES

Material	Quantity	Volume
Biosolids Receiving Unit	2 @ 284 tons	2 @ 338 cu. yds.
Drying Belts	2 @ 13 tons	-
Product Silos	2 @ 300 tons	2 @ 980 cu. yds.
Wastewater Storage Tank	-	300,000 gallons

2. UNIT DISPOSAL COST

Biosolids = \$15/ton transportation + \$70/ton disposal = \$85/ton

Wastewater = \$0.04/gal disposal + \$950/load = \$0.16/gallon

3. DISPOSAL COSTS

Waste	Weight	Volume	Unit Cost	Cost
Biosolids	568 tons	-	\$85/ton	\$48,280
Drying Belts	26 tons	-	\$85/ton	\$2,253
Product Silos	600 tons	-	\$85/ton	\$51,000
Wastewater	-	300,000 gal.	\$0.16/gal	\$48,000
TOTAL				\$149,533

4. EQUIPMENT DECON

Receiving Units: 16 hours x \$50/hour x 2 man crew = \$1,600
Dryers: 32 hours x \$50/hour x 38 man crew = \$4,800
Silos: 16 hours x \$50/hour x \$50/hour x 2 man crew = \$1,600
Wastewater Tank: 40 hours x \$50/hour x 48 man crew = \$8,000
TOTAL = 104 hours = \$16,000

5. COST FOR DECON

Budget Plant Floor and Other Surfaces = 40,000 ft²
From Company = use \$0.50/ft²

6. VOLUME OF WASTEWATER GENERATED

5 gpm x 60 minutes x 104 hours = 31,200 gallons (included in total)

7. COST FOR WATER AND WASTEWATER DISPOSAL

Unit Cost = \$0.04/gallon disposal
= \$950/load transportation
(8,000 gallons per load = \$0.12/gallon)
= \$0.16/gallon

TOTAL = 300,000 gallons x \$0.16/gallon
= \$48,000

8. SAMPLING AND ANALYSIS

Lump Sum = \$5,000

9. COST FOR FACILITY MAINTENANCE

Lump Sum Estimate = \$10,000

10. ENGINEERING QA/QC

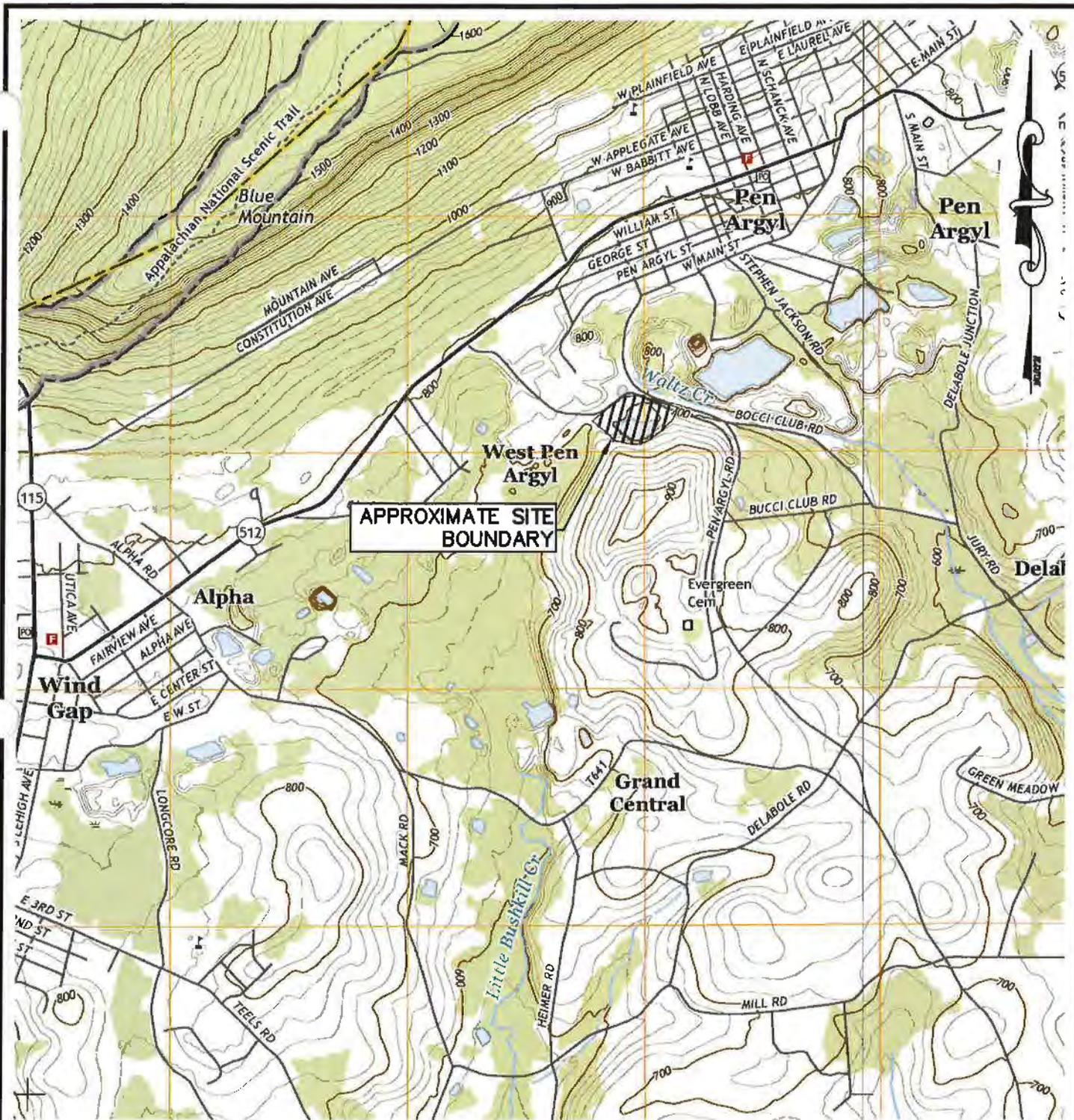
TOTAL = 150 hours x \$75/hour + 40 x \$100/hr. = \$15,250

SBHRC Bond Worksheet

Waste	Quantity	Capacity	Quantity	Units	Method	Weight	Unit Cost (\$/ton)	Total Cost (\$)
Biosolids Receiving Pit	2	284	568	tons	Trans = \$15/ton + Disposal = \$70/ton	Transport and disposal	85.00	48,280
Drying belts	2	13	27	tons	Trans = \$15/ton + Disposal = \$70/ton	Transport and disposal	85.00	2,253
Silos of Pelletized biosolids	2	300	600	tons	Trans = \$15/ton + Disposal = \$70/ton	Transport and disposal	85.00	51,000
Process wastewater storage tank	1	300,000	-	gallons	\$0.04/gal + \$950/8000 gal	Transport and disposal	0.16	48,000
Waste Subtotal			1,195			301,195		149,533
ITEM	Quantity			Unit	Quantity	Unit	Unit Cost (\$/hour)	Total Cost
Equipment Decon								
Receiving Units	16	hours			2	man crew	\$ 50.00	\$ 1,600
Dryers	32	hours			3	man crew	\$ 50.00	\$ 4,800
Silos	16	hours			2	man crew	\$ 50.00	\$ 1,600
Wastewater Tank	40	hours			4	man crew	\$ 50.00	\$ 8,000
Sub-total	104	hours			11	man crew	\$ 200.00	\$ 16,000.00
Surface Decon	0	sq. ft.				per sq. ft.	\$ -	\$ -
Decon Waste	5	gpm			50	hours	\$ -	\$ -
Sampling and Analysis	1	LS			1		\$5,000	\$ 5,000
Reporting	1	LS	0		0		\$ -	\$ 8,750
Maintenance	1	LS					\$ 10,000	\$ 10,000
QA/QC/certification	150	hours				Staff	\$ 75.00	\$ 11,250
	40	hours				Manager	\$ 100.00	\$ 4,000
						Subtotal		\$ 15,250
Worksheet A Subtotal								\$ 55,000
BOND SUBTOTAL								\$ 204,533
Fees								
Inflation		1.73%			1.73%		\$ 3,538	
Admin. Fees		10%			10%		\$ 20,453	
Contingency Fee		12.5%			12.50%		\$ 25,567	
Fee Subtotal								\$ 49,558
TOTAL BOND AMOUNT								\$ 254,091

ATTACHMENT A
FIGURES

**FIGURE 1
SITE LOCATION MAP**



LEGEND

- SCHOOL
- FIRE STATION
- CEMETERY
- POST OFFICE

SOURCE: USGS 7.5 MINUTE QUADRANGLE - WIND GAP AND BANGOR, PA



P.O. Box 468
6912 Old Easton Road
Pipersville PA 18947 USA

1224C Pineview Drive
Morgantown, WV 26505

www.earthres.com

PA office 215.766.1211
WV office 304.212.6886
toll free 800.264.4563

DRAWN BY: SP	CHECKED BY: TGP
DATE: 03/06/2018	PROJECT NO: 151014.003
DRAWING SCALE: 1" = 2000'	

FIGURE 1
SITE LOCATION MAP

SLATE BELT HEAT RECOVERY CENTER
PLAINFIELD TOWNSHIP, NORTHAMPTON COUNTY
PENNSYLVANIA

FIGURE 2
PROCESS FLOW SCHEMATIC

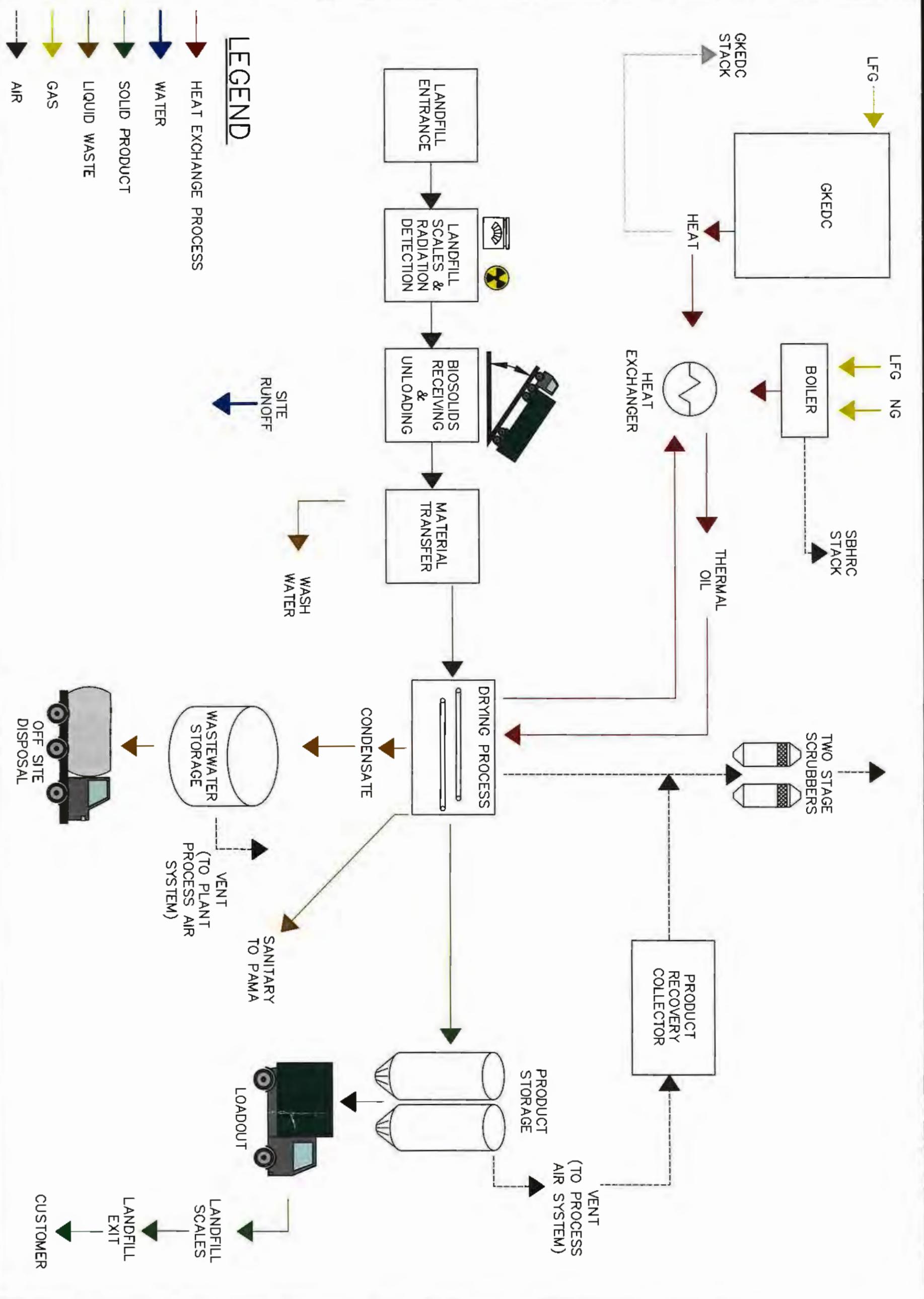


FIGURE 2
PROCESS FLOW SCHEMATIC

SLATE BELT HEAT RECOVERY CENTER
PLAINFIELD TOWNSHIP, NORTHAMPTON COUNTY
PENNSYLVANIA



6812 Old Easton Road
Pipersville, PA 18947 USA

8000 Combs Farm Drive
Morgantown, WV 26508

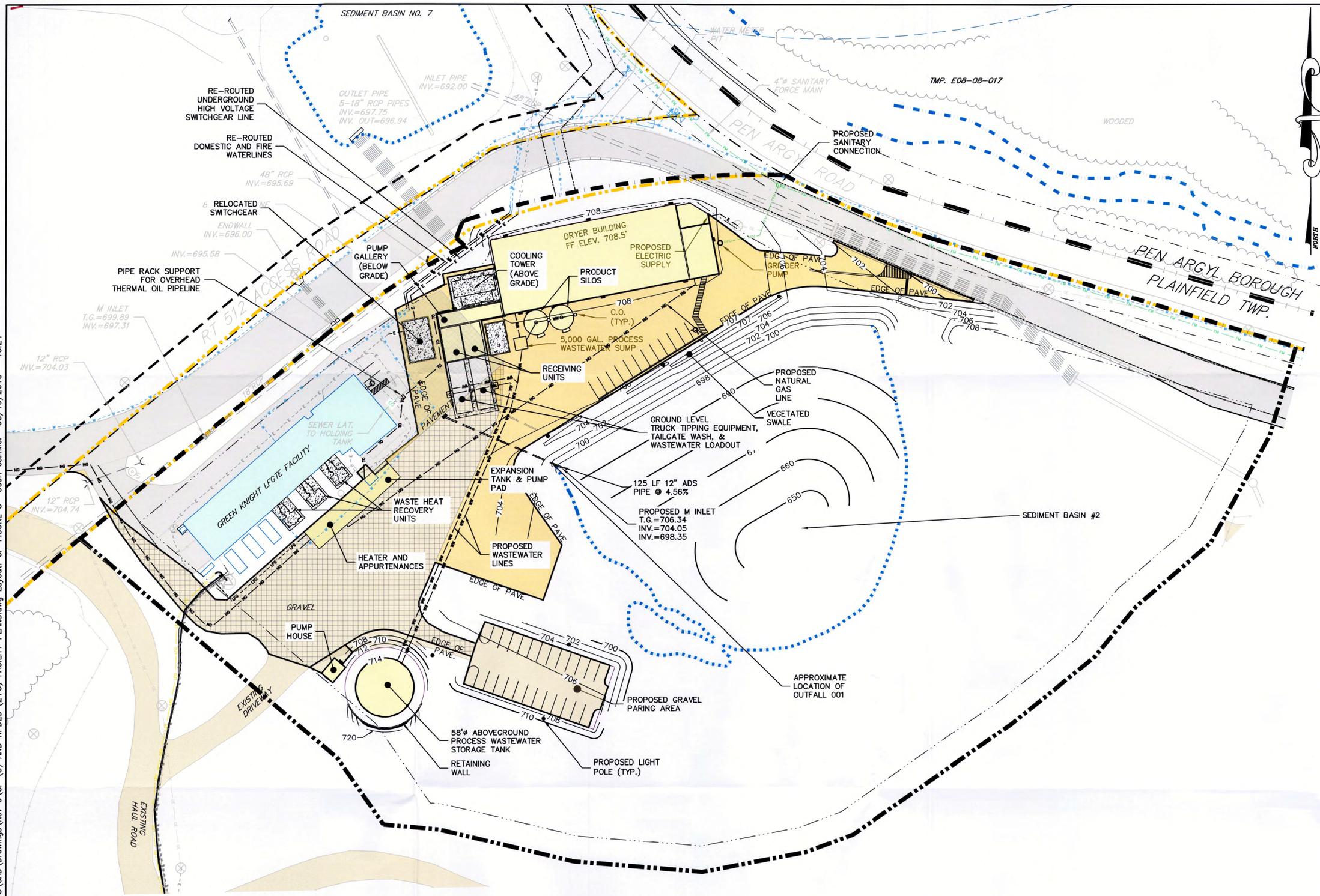
www.earthres.com

PA office 215.766.1211
WV office 304.212.6866
toll free 800.264.4553

DRAWN BY: JJB	CHECKED BY: TGP
DATE: 2/27/18	PROJECT NO: 151014.003
DRAWING SCALE: NOT TO SCALE	

**FIGURE 3
FACILITY PLAN**

F:\PROJECTS\Synagro\151014.004 Permitting Proposal Rev 0\GP (3) AND NPDES (2+3) FACILITY PLANS.dwg Layout: GP FIGURE 3 User: csinler 03/19/2018 16:24



LEGEND

- EXISTING HAUL ROAD/GRAVEL AREA
- EXISTING PAVING
- PROPOSED PAVING
- EXISTING GRAVEL TO BE REPLACED WITH PAVEMENT
- PROPOSED BUILDING/STRUCTURE
- EXISTING GREEN KNIGHT FACILITY
- PROPOSED CONCRETE PADS
- GCSL PROPERTY-R/W BOUNDARY LINE
- ADJACENT PROPERTY BOUNDARY
- BUILDING SETBACK LINE
- PA DOT ULTIMATE RIGHT OF WAY
- PROPOSED LOT BOUNDARY
- EXISTING WATER LINE (APPROXIMATE)
- PROPOSED WATER LINE (APPROXIMATE)
- PROPOSED WASTEWATER LINE
- EXISTING SEWER LINE (APPROXIMATE)
- EXISTING SANITARY FORCEMAIN
- PROPOSED SANITARY FORCEMAIN
- EXISTING LANDFILL GAS UTILITY
- PROPOSED LANDFILL GAS UTILITY
- EXISTING NATURAL GAS UTILITY
- PROPOSED NATURAL GAS UTILITY
- PROPOSED THERMAL OIL LINE
- EXISTING UNDERGROUND ELECTRIC UTILITY
- PROPOSED UNDERGROUND ELECTRIC UTILITY
- EXISTING OVERHEAD ELECTRIC UTILITY (APPROXIMATE LOCATION)
- OVERHEAD UTILITIES POLE
- EXISTING STORM PIPE
- EXISTING CHAIN LINK FENCE
- PROPOSED STORMWATER INLET AND PIPE
- EXISTING STREAMS/PONDS
- EXISTING SEDIMENT BASIN
- PROPOSED POND BOUNDARY
- EXISTING CONCRETE JERSEY BARRIER
- 710 PROPOSED GRADE (10' INTERVAL)
- 702 PROPOSED GRADE (2' INTERVAL)

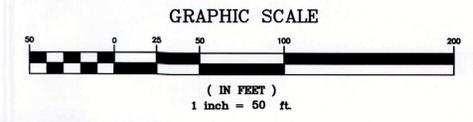
NOTES:

1. THE SITE IS LOCATED OUTSIDE THE 100-YEAR FLOODPLAIN AS REFERENCED FROM THE FLOOD INSURANCE RATE MAPS (FIRM) AS PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AREA (FEMA), FEMA FIRM #42095C0132E.

SEDIMENT BASIN 2
 SEDIMENT BASIN IS AN EXISTING ZERO-DISCHARGE SEDIMENTATION BASIN WHICH ACTS AS A STORMWATER CONTROL FACILITY. THE BASIN IS PERMITTED UNDER THE GCSL SOLID WASTE PERMIT. MODIFICATIONS TO THE BASIN ARE PROPOSED IN ORDER TO ACCOMMODATE THE PROPOSED SLATE BELT HEAT RECOVERY CENTER. THESE INCLUDE BUT ARE NOT LIMITED TO, FILLING A PORTION OF THE BASIN, RELOCATING THE EMERGENCY SPILLWAY, AND RELOCATION OF CONTRIBUTING DRAINAGE FACILITIES. THE MODIFICATIONS ARE DEPICTED FOR REFERENCE PURPOSES ONLY. PLEASE REFER TO THE LATEST APPROVED GCSL FORM 1 FOR ADDITIONAL DETAILS. THE CONTRIBUTING DRAINAGE AREA AND ASSOCIATED DRAINAGE FACILITIES ARE SUBJECT TO THE GCSL PERMIT APPROVALS AND ANY PERTINENT CONDITIONS.

SEWER SERVICE
 NEW SEWER SERVICE AND ASSOCIATED INFRASTRUCTURE PROPOSED FOR THE PROJECT ARE SUBJECT TO REVIEW AND APPROVAL OF THE PEN ARGYL MUNICIPAL AUTHORITY (PAMA). APPROXIMATE SEWAGE FLOWS OF 1,120 GALLONS PER DAY ARE ANTICIPATED. NO INCREASE OR CHANGE IN SERVICE/DEMAND IS PROPOSED FOR THE GREEN KNIGHT ENERGY CENTER.

PUBLIC WATER SERVICE
 THE EXISTING PROJECT AREA IS SERVED BY PUBLIC WATER SERVICE PROVIDED BY PA AMERICAN WATER COMPANY. PA AMERICAN WATER HAVE BEEN ENGAGED AND WILL BE ASSISTING THE APPLICANT WITH THE PROPOSED WATER SERVICE LATERAL. NO INCREASE IN SERVICE/DEMAND IS PROPOSED FOR THE GREEN KNIGHT ENERGY CENTER.



PREPARED FOR: SLATE BELT HEAT RECOVERY CENTER, LLC	
P.O. Box 468 6912 Old Easton Road Pilesgrove, PA 18847 USA	P.O. Box 794 Morgantown, WV 26505 www.eartHRes.com
PA office 215.766.1211 WV office 304.217.6866 toll free 800.264.4553	
FACILITY PLAN	
SLATE BELT HEAT RECOVERY CENTER PLAINFIELD TOWNSHIP, NORTHAMPTON COUNTY, PA.	
CHECKED BY: TOP	PROJECT NO: 151014.003
DATE: 3/12/18	DRAWING NUMBER: FIGURE 3
DRAWN BY: JUB	SHEET 1 OF 1
REVISIONS	

FIGURE 4
PROCESS LAYOUT

ATTACHMENT B
NOTIFICATION LETTERS

March 12, 2018

Northampton County Council
Northampton County
669 Washington Street
Easton, PA 18042

**RE: Slate Belt Heat Recovery Center, LLC
PA DEP Municipal Waste General Permit Application
Plainfield Township, Northampton County
EarthRes Project No. 151014.003**

Dear Council:

The purpose of this notification is to inform you of our intent to submit a Municipal Waste General Permit Application to the Pennsylvania Department of Environmental Protection (PA DEP) Northeast Regional Office (NERO) for the following project:

Project Name: Municipal Waste General Permit Application
Slate Belt Heat Recovery Center

Applicant Contact: John Goodwin
Slate Belt Heat Recovery Center, LLC
435 Williams Court, Suite 100
Baltimore, MD 21220

Project Location: 2100 Block of Pen Argyl Road
Plainfield Township, Northampton County

Project Description: Slate Belt Heat Recovery Center, LLC proposes to permit and construct a biosolids facility which is contained within a parcel of land (Parcel ID No. E8 11 8 0626) owned by Grand Central Sanitary Landfill (GCSL) and situated near Green Knight Economic Development Corporation (GKEDC) facilities in Plainfield Township, Northampton County, PA. The process involves drying dewatered biosolid materials to produce a Class A biosolid that can be used as a fertilizer blending agent, soil conditioner, and/or a renewable energy producing product.

Section 1905-A of the Commonwealth Administrative Code, as amended by Act 14, requires that each applicant for a PA DEP permit must give written notice to the municipality, county, and contiguous land owners in which the permitted activity is located. The written notices shall be received by the municipality, county, and contiguous land owners at least 30 days before the

Department may issue or deny the permit.

Acts 67, 68 and 127 of 2000 amended the Municipalities Planning Code (MPC) and direct state agencies to consider comprehensive plans and zoning ordinances when reviewing applications for permitting of facilities or infrastructure, and specify that state agencies may rely upon comprehensive plans and zoning ordinances under certain conditions as described in Sections 619.2 and 1105 of the MPC.

Enclosed is a draft General Information Form (GIF) we have completed for this project. PA DEP invites you to review the attached GIF and comment on the project; please be specific when identifying any areas of conflict. If you wish to submit comments for the Department to consider in review of this project, you must respond within 30 days to the PA DEP Regional Office listed below. If there are no comments received by the end of the comment period, PA DEP will proceed with the normal application review process.

Please submit any comments concerning this project within 30 days from date of receipt of this letter to the Program Manager, Waste Management Program, PA DEP, Northeast Regional Office, 2 Public Square, Wilkes-Barre, PA 18711-0790; telephone (570) 826-2511.

For more information about this land use review process, please visit www.dep.state.pa.us (DEP Keyword: Land Use Reviews).

Sincerely,
EarthRes Group, Inc.



Thomas G. Pullar, P.E.
Senior Project Manager

Enclosure: As stated

cc: John Goodwin, Slate Belt Heat Recovery Center, LLC (w/ enclosure)
Glenn Kempa, GCSL (w/ enclosure)
Tom Petrucci, Plainfield Township (w/ enclosure)
Carlton Snyder, GKEDC (w/ enclosure)

VIA OVERNIGHT MAIL



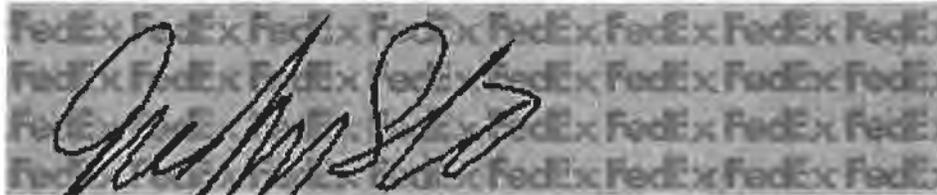
March 13, 2018

Dear Customer:

The following is the proof-of-delivery for tracking number **780006940632**.

Delivery Information:

Status:	Delivered	Delivered to:	Mailroom
Signed for by:	J.SCHAEFER	Delivery location:	669 WASHINGTON ST EASTON, PA 18042
Service type:	FedEx Priority Overnight	Delivery date:	Mar 13, 2018 08:44
Special Handling:	Deliver Weekday		



Shipping Information:

Tracking number:	780006940632	Ship date:	Mar 12, 2018
		Weight:	0.5 lbs/0.2 kg

Recipient:
NORTHAMPTON COUNTY COUNCIL
NORTHAMPTON COUNTY COURTHOUSE
669 WASHINGTON ST
EASTON, PA 18042 US

Shipper:
BARBARA JONES
EarthRes Group, Inc.
6912 Old Easton Road
PIPERSVILLE, PA 18947 US

Reference
Department number

151014.003
Pipersville

Thank you for choosing FedEx.



**GENERAL INFORMATION FORM -- AUTHORIZATION APPLICATION
FOR A RESIDUAL OR MUNICIPAL WASTE GENERAL PERMIT APPLICATION**

Before completing this General Information Form (GIF), read the step-by-step instructions provided in this application package. This version of the General Information Form (GIF) must be completed and returned with any municipal or residual general permit application being submitted to the Department.

Client ID# TBD		Related ID#s (If Known)		DEP USE ONLY Date Received & General Notes	
Site ID# TBD		APS ID# _____			
Facility ID# TBD		Auth ID# _____			

CLIENT INFORMATION

DEP Client ID# TBD		Client Type / Code LLC			
Organization Name or Registered Fictitious Name Slate Belt Heat Recovery Center, LLC			Employer ID# (EIN) XX-XXXXXXX		Dun & Bradstreet ID#
Individual Last Name N/A		First Name		MI	Suffix SSN
Additional Individual Last Name		First Name		MI	Suffix SSN
Mailing Address Line 1 435 Williams Court			Mailing Address Line 2 Suite 100		
Address Last Line - City Baltimore		State MD	ZIP+4 21220-2888	Country USA	
Client Contact Last Name Goodwin		First Name John		MI	Suffix
Client Contact Title Vice President - Engineering				Phone 443-489-9069	Ext
Email Address jgoodwin@SYNAGRO.com				FAX N/A	

SITE INFORMATION

DEP Site ID# TBD		Site Name Slate Belt Heat Recovery Center			
EPA ID#		Estimated Number of Employees to be Present at Site			16
Description of Site Biosolids Processing Facility					
County Name Northampton		Municipality Plainfield		City <input type="checkbox"/>	Boro <input type="checkbox"/>
County Name		Municipality		City <input type="checkbox"/>	Twp <input checked="" type="checkbox"/>
State PA		State PA			
Site Location Line 1 2100 block of Pen Argyl Rd.			Site Location Line 2		
Site Location Last Line - City Pen Argyl		State PA	ZIP+4 18072		
Detailed Written Directions to Site Take Route 33 to the Route 512 Wind Gap/Pen Argyl exit. Off the exit, turn onto Route 512 North (a right turn from Route 33 Northbound). Follow Route 512 through Wind Gap, turning right at the Turkey Hill in Wind Gap (3rd traffic light) to stay on Route 512. After 1.4 miles, turn right into Grand Central Sanitary Landfill. The entrance to the Slate Belt Heat Recovery Center will be on the right adjacent to the Green Knight Energy Center at 2147 Pen Argyl Road, Pen Argyl, PA.					
Site Contact Last Name Goodwin		First Name John		MI	Suffix
Site Contact Title Vice President - Engineering			Site Contact Firm Slate Belt Heat Recovery Center, LLC		
Mailing Address Line 1 435 Williams Court			Mailing Address Line 2		
Mailing Address Last Line - City Baltimore		State MD	ZIP+4 21220-2888		
Phone 443-489-9069	Ext	FAX N/A	Email Address jgoodwin@SYNAGRO.com		

NAICS Codes (Two- & Three-Digit Codes – List All That Apply)
562

6-Digit Code (Optional)
562219

Client to Site Relationship
OWNOP Owner/Operator

FACILITY INFORMATION

Modification of Existing Facility

- | | | |
|---|--|--------------------------------|
| 1. Will this project modify an existing facility, system, or activity? | Yes
<input checked="" type="checkbox"/> | No
<input type="checkbox"/> |
| 2. Will this project involve an addition to an existing facility, system, or activity? | Yes
<input checked="" type="checkbox"/> | No
<input type="checkbox"/> |

If "Yes", check all relevant facility types and provide DEP facility identification numbers below.

Facility Type	DEP Fac ID#	Facility Type	DEP Fac ID#
<input checked="" type="checkbox"/> Air Emission Plant	GKEDC #574507	<input type="checkbox"/> Land Recycling Cleanup Location	
<input type="checkbox"/> Beneficial Use (water)		<input type="checkbox"/> Mine Drainage Trm/Land Recy Proj Location	
<input type="checkbox"/> Captive Hazardous Waste Operation		<input type="checkbox"/> Municipal Waste Operation	GCSL #100265
<input type="checkbox"/> Coal Ash Beneficial Use Operation		<input type="checkbox"/> Public Water Supply System	
<input type="checkbox"/> Coal Mining Operation		<input type="checkbox"/> Radiation Facility	
<input type="checkbox"/> Commercial Hazardous Waste Operation		<input type="checkbox"/> Residual Waste Operation	
<input type="checkbox"/> Encroachment Location (water, wetland)		<input type="checkbox"/> Storage Tank Location	
<input type="checkbox"/> Erosion & Sediment Control Facility		<input type="checkbox"/> Water Pollution Control Facility	
<input type="checkbox"/> Industrial Minerals Mining Operation		<input type="checkbox"/> Other:	

Latitude/Longitude Point of Origin	Latitude			Longitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
CNTAR	40°	51'	34"	-75°	15'	41"

PROJECT INFORMATION

Project Name

Slate Belt Heat Recovery Center

Project Description

The project involves drying dewatered biosolids to produce a Class A biosolid products that will be beneficially used as a fertilizer blending agent, soil conditioner, and/or a renewable fuel product. No process wastewater will be discharged from the facility. Stormwater will runoff as sheet flow to GCSL's sediment basin #2.

Project Consultant Last Name Pullar	First Name Thomas	Mi G.	Suffix P.E.
Project Consultant Title Senior Project Manager	Consulting Firm EarthRes Group, Inc.		
Mailing Address Line 1 P.O. Box 468	Mailing Address Line 2 6912 Old Easton Road		
Address Last Line – City Pipersville	State PA	ZIP+4 18947	
Phone (215) 766-1211	Ext	FAX (215) 766-1245	Email Address TPullar@earthres.com

1. Is this application for an authorization type on the list of authorizations affected by the land use policy? Yes No

Note: If "Yes", you must complete the General Information Form (1300-PM-BIT0001) instead of this form.

COORDINATION INFORMATION

Note: The PA Historical and Museum Commission must be notified of proposed projects in accordance with DEP Technical Guidance Document 012-0700-001 and the accompanying Cultural Resource Notice Form, if applicable.

If the activity will be a mining project (i.e., mining of coal or industrial minerals, coal refuse disposal and/or the operation of a coal or industrial minerals preparation/processing facility), respond to questions 1.0 and 2.0 below.

If the activity will not be a mining project, skip questions 1.0 and 2.0 and begin with question 3.0.

- | | | | |
|-------|---|--|---|
| 1.0 | Is this a coal mining project? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form. | Yes
<input type="checkbox"/> | No
<input type="checkbox"/> |
| 2.0 | Is this a non-coal (industrial minerals) mining project? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form. | Yes
<input type="checkbox"/> | No
<input type="checkbox"/> |
| 3.0 | Will your project, activity, or authorization have anything to do with a well related to oil or gas production, site development for such activity, or the waste from such a well? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form. | Yes
<input type="checkbox"/> | No
<input checked="" type="checkbox"/> |
| 4.0 | Will the project involve a construction activity that results in earth disturbance? If "Yes", specify the total disturbed acreage. (DEP Use/4x66) | Yes
<input checked="" type="checkbox"/> | No
<input type="checkbox"/> |
| 4.0.1 | Total Disturbed Acreage | 6.3 acres | |

5.0	Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water (including wetlands)? (DEP Use/4x66) (Modify GCSL Sediment Basin #2)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
6.0	Will the project involve discharge of industrial wastewater or stormwater to a dry swale, surface water, ground water or an existing sanitary sewer system or separate storm water system? If "Yes", discuss in <i>Project Description</i> . (DEP Use/4x62) (NPDES permit for stormwater runoff into non-discharging Sediment Basin #2)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
7.0	Will the project involve the construction and operation of industrial waste treatment facilities? (DEP Use/4x62) DOA submitted with this application	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
8.0	Will the project involve construction of sewage treatment facilities, sanitary sewers, or sewage pumping stations? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form. (Authority contacted; grinder pump will convey sanitary wastewater to Pen Argyl Municipal Authority)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
9.0	Is this project for the beneficial use of biosolids for land application within Pennsylvania? If "Yes" indicate how much (i.e. gallons or dry tons per year). (DEP Use/4X62)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
9.0.1	Gallons Per Year (residential septage)	_____			
9.0.2	Dry Tons Per Year (biosolids)	_____			
10.0	Does the project involve construction, modification or removal of a dam? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
11.0	Will the project interfere with the flow from, or otherwise impact, a dam? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
12.0	Will the project involve operations (excluding during the construction period) that produce air emissions (i.e., NOX, VOC, etc.)? If "Yes", identify each type of emission followed by the amount of that emission. (DEP Use/4x70)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
12.0.1	Enter all types & amounts of emissions; separate each set with semicolons.	Emission calculations provided in Plan Approval Application under separate cover.			
13.0	Is an on-site drinking water supply (well), other than individual house wells, proposed for your project? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
14.0	Will your project involve purchasing water in bulk, excluding during the construction period? If "Yes", name the provider. Also, indicate the daily number of employees or guests served. (DEP Use/4x81)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
14.0.1	Provider's Name	_____			
14.0.2	Number of Employees/Guests	_____			
15.0	Is your project to be served by public water supply? If "Yes", indicate name of supplier and attach letter from supplier stating that it will serve the project. (DEP Use/4x81)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
15.0.1	Supplier's Name	Pennsylvania American Water			
15.0.2	Letter of Approval from Supplier is Attached	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
16.0	Will this project involve a new or increased drinking water withdrawal from a stream or other water body? If "Yes", provide name of stream. (DEP Use/4x81)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
16.0.1	Stream Name	_____			
17.0	Will the construction or operation of this project involve treatment, storage, reuse, or disposal of waste? If "Yes", indicate what type (i.e., hazardous, municipal (including infectious & chemotherapeutic), residual) and the amount to be treated, stored, re-used or disposed. (DEP/Use4x32)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
17.0.1	Type & Amount	Biosolids: 400 wet tpd (84 dry tpd; 30,660 dry tons / year)			
18.0	Will your project involve the removal of coal, minerals, etc. as part of any earth disturbance activities? (DEP Use/48y1)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
19.0	Does your project involve installation of a field constructed underground storage tank? If "Yes", list each Substance & its Capacity. Note: Applicant may need a Storage Tank Site Specific Installation Permit. (DEP Use/2570)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
19.0.1	Enter all substances & capacity of each; separate each set with semicolons.	_____			

20.0 Does your project involve installation of an aboveground storage tank greater than 21,000 gallons capacity at an existing facility? If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. (DEP Use/2570) Yes No

20.0.1 Enter all substances & capacity of each; separate each set with semicolons.

21.0 Does your project involve installation of a tank greater than 1,100 gallons which will contain a highly hazardous substance as defined in DEP's Regulated Substances List, 2570-BK-DEP2724? If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. (DEP Use/2570) Yes No

21.0.1 Enter all substances & capacity of each; separate each set with semicolons.

22.0 Does your project involve installation of a storage tank at a new facility with a total AST capacity greater than 21,000 gallons? If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. (DEP Use/2570) Yes No

22.0.1 Enter all substances & capacity of each; separate each set with semicolons. 300,000 gal process wastewater tank
5,000 gal sulfuric acid (H2SO4) (Acid) Tank
3,000 gal sodium hydroxide (NAOH) (Caustic) Tank
5,000 gal sodium hypochlorite (NaOCl) (Bleach) Tank

CERTIFICATION

I certify that I have the authority to submit this application on behalf of the applicant named herein and that the information provided in this application is true and correct to the best of my knowledge and information.

Type or Print Name John Goodwin

Signature

Vice President - Engineering
Title

Date

March 12, 2018

Plainfield Township Board of Supervisors
Plainfield Township
6292 Sullivan Trail
Nazareth, PA 18064

**RE: Slate Belt Heat Recovery Center, LLC
PA DEP Municipal Waste General Permit Application
Plainfield Township, Northampton County
EarthRes Project No. 151014.003**

Dear Supervisors:

The purpose of this notification is to inform you of our intent to submit a Municipal Waste General Permit Application to the Pennsylvania Department of Environmental Protection (PA DEP) Northeast Regional Office (NERO) for the following project:

Project Name: Municipal Waste General Permit Application
Slate Belt Heat Recovery Center

Applicant Contact: John Goodwin
Slate Belt Heat Recovery Center, LLC
435 Williams Court, Suite 100
Baltimore, MD 21220

Project Location: 2100 Block of Pen Argyl Road
Plainfield Township, Northampton County

Project Description: Slate Belt Heat Recovery Center, LLC proposes to permit and construct a biosolids facility which is contained within a parcel of land (Parcel ID No. E8 11 8 0626) owned by Grand Central Sanitary Landfill (GCSL) and situated near Green Knight Economic Development Corporation (GKEDC) facilities in Plainfield Township, Northampton County, PA. The process involves drying dewatered biosolid materials to produce a Class A biosolid that can be used as a fertilizer blending agent, soil conditioner, and/or a renewable energy producing product.

Section 1905-A of the Commonwealth Administrative Code, as amended by Act 14, requires that each applicant for a PA DEP permit must give written notice to the municipality, county, and contiguous land owners in which the permitted activity is located. The written notices shall be received by the municipality, county, and contiguous land owners at least 30 days before the Department may issue or deny the permit.

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Enclosed is a draft General Information Form (GIF) we have completed for this project. PA DEP invites you to review the attached GIF and comment on the project; please be specific when identifying any areas of conflict. If you wish to submit comments for the Department to consider in review of this project, you must respond within 30 days to the PA DEP Regional Office listed below. If there are no comments received by the end of the comment period, PA DEP will proceed with the normal application review process.

Please submit any comments concerning this project within 30 days from date of receipt of this letter to the Program Manager, Waste Management Program, PA DEP, Northeast Regional Office, 2 Public Square, Wilkes-Barre, PA 18711-0790; telephone (570) 826-2511.

For more information about this land use review process, please visit www.dep.state.pa.us (DEP Keyword: Land Use Reviews).

Sincerely,
EarthRes Group, Inc.



Thomas G. Pullar, P.E.
Senior Project Manager

Enclosure: As stated

cc: John Goodwin, Slate Belt Heat Recovery Center, LLC (w/ enclosure)
Glenn Kempa, GCSL (w/ enclosure)
Carlton Snyder, GKEDC (w/ enclosure)

VIA OVERNIGHT MAIL



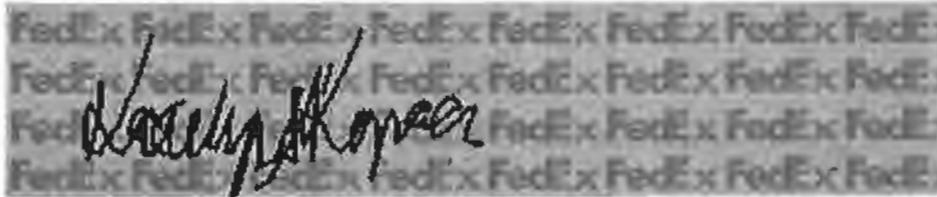
March 13, 2018

Dear Customer:

The following is the proof-of-delivery for tracking number **780007152674**.

Delivery Information:

Status:	Delivered	Delivered to:	Receptionist/Front Desk
Signed for by:	K.KOPACH	Delivery location:	6292 SULLIVAN TRL NAZARETH, PA 18064
Service type:	FedEx Priority Overnight	Delivery date:	Mar 13, 2018 08:52
Special Handling:	Deliver Weekday		



Shipping Information:

Tracking number:	780007152674	Ship date:	Mar 12, 2018
		Weight:	0.5 lbs/0.2 kg

Recipient:
MUNICIPAL SECRETARY
PLAINFIELD TOWNSHIP PLANNING COMM.
6292 SULLIVAN TRAIL
NAZARETH, PA 18064 US

Shipper:
BARBARA JONES
EarthRes Group, Inc.
6912 Old Easton Road
PIPERSVILLE, PA 18947 US

Reference
Department number

151014.003
Pipersville

Thank you for choosing FedEx.



**GENERAL INFORMATION FORM -- AUTHORIZATION APPLICATION
FOR A RESIDUAL OR MUNICIPAL WASTE GENERAL PERMIT APPLICATION**

Before completing this General Information Form (GIF), read the step-by-step instructions provided in this application package. This version of the General Information Form (GIF) must be completed and returned with any municipal or residual general permit application being submitted to the Department.

Related ID#s (If Known)		DEP USE ONLY	
Client ID#	TBD	APS ID#	Date Received & General Notes
Site ID#	TBD	Auth ID#	
Facility ID#	TBD		

CLIENT INFORMATION

DEP Client ID#	Client Type / Code			
TBD	LLC			
Organization Name or Registered Fictitious Name		Employer ID# (EIN)	Dun & Bradstreet ID#	
Slate Belt Heat Recovery Center, LLC		XX-XXXXXXX		
Individual Last Name	First Name	MI	Suffix	SSN
N/A				
Additional Individual Last Name	First Name	MI	Suffix	SSN
Mailing Address Line 1		Mailing Address Line 2		
435 Williams Court		Suite 100		
Address Last Line - City		State	ZIP+4	Country
Baltimore		MD	21220-2888	USA
Client Contact Last Name	First Name	MI	Suffix	
Goodwin	John			
Client Contact Title		Phone	Ext	
Vice President - Engineering		443-489-9069		
Email Address		FAX		
jgoodwin@SYNAGRO.com		N/A		

SITE INFORMATION

DEP Site ID#	Site Name			
TBD	Slate Belt Heat Recovery Center			
EPA ID#	Estimated Number of Employees to be Present at Site			16
Description of Site				
Biosolids Processing Facility				
County Name	Municipality	City	Boro	Twp
Northampton	Plainfield	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
County Name	Municipality	City	Boro	Twp
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Site Location Line 1		Site Location Line 2		
2100 block of Pen Argyl Rd.				
Site Location Last Line - City		State	ZIP+4	
Pen Argyl		PA	18072	
Detailed Written Directions to Site				
Take Route 33 to the Route 512 Wind Gap/Pen Argyl exit. Off the exit, turn onto Route 512 North (a right turn from Route 33 Northbound). Follow Route 512 through Wind Gap, turning right at the Turkey Hill in Wind Gap (3rd traffic light) to stay on Route 512. After 1.4 miles, turn right into Grand Central Sanitary Landfill. The entrance to the Slate Belt Heat Recovery Center will be on the right adjacent to the Green Knight Energy Center at 2147 Pen Argyl Road, Pen Argyl, PA.				
Site Contact Last Name	First Name	MI	Suffix	
Goodwin	John			
Site Contact Title		Site Contact Firm		
Vice President - Engineering		Slate Belt Heat Recovery Center, LLC		
Mailing Address Line 1		Mailing Address Line 2		
435 Williams Court				
Mailing Address Last Line - City		State	ZIP+4	
Baltimore		MD	21220-2888	
Phone	Ext	FAX	Email Address	
443-489-9069		N/A	jgoodwin@SYNAGRO.com	

NAICS Codes (Two- & Three-Digit Codes – List All That Apply)
562

6-Digit Code (Optional)
562219

Client to Site Relationship
OWNOP Owner/Operator

FACILITY INFORMATION

Modification of Existing Facility

- | | | |
|---|--|--------------------------------|
| 1. Will this project modify an existing facility, system, or activity? | Yes
<input checked="" type="checkbox"/> | No
<input type="checkbox"/> |
| 2. Will this project involve an addition to an existing facility, system, or activity? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
- If "Yes", check all relevant facility types and provide DEP facility identification numbers below.*

Facility Type	DEP Fac ID#	Facility Type	DEP Fac ID#
<input checked="" type="checkbox"/> Air Emission Plant	GKEDC #574507	<input type="checkbox"/> Land Recycling Cleanup Location	
<input type="checkbox"/> Beneficial Use (water)		<input type="checkbox"/> MineDrainageTrmt/LandRecyProjLocation	
<input type="checkbox"/> Captive Hazardous Waste Operation		<input type="checkbox"/> Municipal Waste Operation	GCSL #100265
<input type="checkbox"/> Coal Ash Beneficial Use Operation		<input type="checkbox"/> Public Water Supply System	
<input type="checkbox"/> Coal Mining Operation		<input type="checkbox"/> Radiation Facility	
<input type="checkbox"/> Commercial Hazardous Waste Operation		<input type="checkbox"/> Residual Waste Operation	
<input type="checkbox"/> Encroachment Location (water, wetland)		<input type="checkbox"/> Storage Tank Location	
<input type="checkbox"/> Erosion & Sediment Control Facility		<input type="checkbox"/> Water Pollution Control Facility	
<input type="checkbox"/> Industrial Minerals Mining Operation		<input type="checkbox"/> Other:	

Latitude/Longitude Point of Origin	Latitude			Longitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
CNTAR	40°	51'	34"	-75°	15'	41"

PROJECT INFORMATION

Project Name
Slate Belt Heat Recovery Center

Project Description

The project involves drying dewatered biosolids to produce a Class A biosolid products that will be beneficially used as a fertilizer blending agent, soil conditioner, and/or a renewable fuel product. No process wastewater will be discharged from the facility. Stormwater will runoff as sheet flow to GCSL's sediment basin #2.

Project Consultant Last Name Pullar	First Name Thomas	MI G.	Suffix P.E.
Project Consultant Title Senior Project Manager	Consulting Firm EarthRes Group, Inc.		
Mailing Address Line 1 P.O. Box 468	Mailing Address Line 2 6912 Old Easton Road		
Address Last Line – City Pipersville	State PA	ZIP+4 18947	
Phone (215) 766-1211	Ext	FAX (215) 766-1245	Email Address TPullar@earthres.com

1. Is this application for an authorization type on the list of authorizations affected by the land use policy? Yes No
 Note: If "Yes", you must complete the General Information Form (1300-PM-BIT0001) instead of this form.

COORDINATION INFORMATION

Note: The PA Historical and Museum Commission must be notified of proposed projects in accordance with DEP Technical Guidance Document 012-0700-001 and the accompanying Cultural Resource Notice Form, if applicable.

If the activity will be a mining project (i.e., mining of coal or industrial minerals, coal refuse disposal and/or the operation of a coal or industrial minerals preparation/processing facility), respond to questions 1.0 and 2.0 below.

If the activity will not be a mining project, skip questions 1.0 and 2.0 and begin with question 3.0.

- | | | | | | |
|------------|--|-------------------------------------|-----|-------------------------------------|----|
| 1.0 | Is this a coal mining project? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form. | <input type="checkbox"/> | Yes | <input type="checkbox"/> | No |
| 2.0 | Is this a non-coal (industrial minerals) mining project? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form. | <input type="checkbox"/> | Yes | <input type="checkbox"/> | No |
| 3.0 | Will your project, activity, or authorization have anything to do with a well related to oil or gas production, site development for such activity, or the waste from such a well? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form. | <input type="checkbox"/> | Yes | <input checked="" type="checkbox"/> | No |
| 4.0 | Will the project involve a construction activity that results in earth disturbance? If "Yes", specify the total disturbed acreage. (DEP Use/4x66) | <input checked="" type="checkbox"/> | Yes | <input type="checkbox"/> | No |
- 4.0.1** Total Disturbed Acreage 6.3 acres

5.0	Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water (including wetlands)? (DEP Use/4x66) (Modify GCSL Sediment Basin #2)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
6.0	Will the project involve discharge of industrial wastewater or stormwater to a dry swale, surface water, ground water or an existing sanitary sewer system or separate storm water system? If "Yes", discuss in <i>Project Description</i> . (DEP Use/4x62) (NPDES permit for stormwater runoff into non-discharging Sediment Basin #2)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
7.0	Will the project involve the construction and operation of Industrial waste treatment facilities? (DEP Use/4x62) DOA submitted with this application	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
8.0	Will the project involve construction of sewage treatment facilities, sanitary sewers, or sewage pumping stations? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form. (Authority contacted; grinder pump will convey sanitary wastewater to Pen Argyl Municipal Authority)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
9.0	Is this project for the beneficial use of biosolids for land application within Pennsylvania? If "Yes" indicate how much (i.e. gallons or dry tons per year). (DEP Use/4X62)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
	9.0.1 Gallons Per Year (residential septage)				
	9.0.2 Dry Tons Per Year (biosolids)				
10.0	Does the project involve construction, modification or removal of a dam? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
11.0	Will the project interfere with the flow from, or otherwise impact, a dam? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
12.0	Will the project involve operations (excluding during the construction period) that produce air emissions (i.e., NOX, VOC, etc.)? If "Yes", identify each type of emission followed by the amount of that emission. (DEP Use/4x70)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
	12.0.1 Enter all types & amounts of emissions; separate each set with semicolons.	Emission calculations provided in Plan Approval Application under separate cover.			
13.0	Is an on-site drinking water supply (well), other than individual house wells, proposed for your project? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
14.0	Will your project involve purchasing water in bulk, excluding during the construction period? If "Yes", name the provider. Also, indicate the daily number of employees or guests served. (DEP Use/4x81)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
	14.0.1 Provider's Name				
	14.0.2 Number of Employees/Guests				
15.0	Is your project to be served by public water supply? If "Yes", indicate name of supplier and attach letter from supplier stating that it will serve the project. (DEP Use/4x81)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
	15.0.1 Supplier's Name	Pennsylvania American Water			
	15.0.2 Letter of Approval from Supplier is Attached	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
16.0	Will this project involve a new or increased drinking water withdrawal from a stream or other water body? If "Yes", provide name of stream. (DEP Use/4x81)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
	16.0.1 Stream Name				
17.0	Will the construction or operation of this project involve treatment, atorage, reuse, or disposal of waste? If "Yes", indicate what type (i.e., hazardous, municipal (including infectious & chemotherapeutic), residual) and the amount to be treated, stored, re-used or disposed. (DEP/Use4x32)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
	17.0.1 Type & Amount	Biosolids: 400 wet tpd (84 dry tpd;30,660 dry tons / year)			
18.0	Will your project involve the removal of coal, minerals, etc. as part of any earth disturbance activities? (DEP Use/48y1)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
19.0	Does your project involve installation of a field constructed underground storage tank? If "Yes", list each Substance & its Capacity. Note: Applicant may need a Storage Tank Site Specific Installation Permit. (DEP Use/2570)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
	19.0.1 Enter all substances & capacity of each; separate each set with semicolons.				

- 20.0 Does your project involve installation of an aboveground storage tank greater than 21,000 gallons capacity at an existing facility? If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. (DEP Use/2570) Yes No
20.0.1 Enter all substances & capacity of each; separate each set with semicolons.
- 21.0 Does your project involve installation of a tank greater than 1,100 gallons which will contain a highly hazardous substance as defined in DEP's Regulated Substances List, 2570-BK-DEP2724? If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. (DEP Use/2570) Yes No
21.0.1 Enter all substances & capacity of each; separate each set with semicolons.
- 22.0 Does your project involve installation of a storage tank at a new facility with a total AST capacity greater than 21,000 gallons? If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. (DEP Use/2570) Yes No
22.0.1 Enter all substances & capacity of each; separate each set with semicolons. 300,000 gal process wastewater tank
5,000 gal sulfuric acid (H2SO4) (Acid) Tank
3,000 gal sodium hydroxide (NAOH) (Caustic) Tank
5,000 gal sodium hypochlorite (NaOCl) (Bleach) Tank

CERTIFICATION

I certify that I have the authority to submit this application on behalf of the applicant named herein and that the information provided in this application is true and correct to the best of my knowledge and information.

Type or Print Name John Goodwin

Signature _____ Vice President - Engineering _____ Date _____
Title

March 12, 2018

Lehigh Valley Planning Commission
961 Marcon Boulevard – Suite 310
Allentown, PA 18109
Phone: 610-264-4544

**RE: Slate Belt Heat Recovery Center, LLC
PA DEP Municipal Waste General Permit Application
Plainfield Township, Northampton County
EarthRes Project No. 151014.003**

Dear Commissioners:

The purpose of this notification is to inform you of our intent to submit a permit application to the Pennsylvania Department of Environmental Protection (PA DEP) for the following project:

Project Name: Municipal Waste General Permit Application
Slate Belt Heat Recovery Center

Applicant Contact: John Goodwin
Slate Belt Heat Recovery Center, LLC
435 Williams Court, Suite 100
Baltimore, MD 21220

Project Location: 2100 Block of Pen Argyl Road
Plainfield Township, Northampton County

Project Description: Slate Belt Heat Recovery Center, LLC proposes to permit and construct a biosolids facility which is contained within a parcel of land (Parcel ID No. E8 11 8 0626) owned by Grand Central Sanitary Landfill (GCSL) and situated near Green Knight Economic Development Corporation (GKEDC) facilities in Plainfield Township, Northampton County, PA. The process involves drying dewatered biosolid materials to produce a Class A biosolid that can be used as a fertilizer blending agent, soil conditioner, and/or a renewable energy producing product.

Section 1905-A of the Commonwealth Administrative Code, as amended by Act 14, requires that each applicant for a PA DEP permit must give written notice to the municipality and the county in which the permitted activity is located. The written notices shall be received by the municipality and county at least 30 days before the Department may issue or deny the permit.

Acts 67, 68 and 127 of 2000 amended the Municipalities Planning Code (MPC) and directs state agencies to consider comprehensive plans and zoning ordinances when reviewing applications for permitting of facilities or infrastructure, and specifies that state agencies may rely upon comprehensive plans and zoning ordinances under certain conditions as described in Sections 619.2 and 1105 of the MPC.

Enclosed is a draft General Information Form (GIF) we have completed for this project. PA DEP invites you to review the attached GIF and comment on the project; please be specific when identifying any areas of conflict. If you wish to submit comments for PA DEP to consider in review of this project, you must respond within 30 days to the PA DEP Regional Office listed below. If there are no comments received by the end of the comment period, DEP will proceed with the normal application review process.

Please submit any comments concerning this project within 30 days from date of receipt of this letter to the Permits Chief, Clean Water Program, PA DEP, Northeast Regional Office, 2 Public Square, Wilkes-Barre, PA 18701-1915; telephone (570) 826-2511.

For more information about this land use review process, please visit www.dep.state.pa.us (DEP Keyword: Land Use Reviews).

Sincerely,
EarthRes Group, Inc.



Thomas G. Pullar, P.E.
Senior Project Manager

Enclosure: As stated

cc: John Goodwin, Slate Belt Heat Recovery Center, LLC (w/ enclosure)
Glenn Kempa, GCSL (w/ enclosure)
Tom Petrucci, Plainfield Township (w/ enclosure)
Carlton Snyder, GKEDC (w/ enclosure)

VIA OVERNIGHT MAIL



March 13, 2018

Dear Customer:

The following is the proof-of-delivery for tracking number **780006592890**.

Delivery Information:

Status:	Delivered	Delivered to:	Receptionist/Front Desk
Signed for by:	S.SEREGYLES	Delivery location:	961 MARCON BLVD 310 ALLENTOWN, PA 18103
Service type:	FedEx Priority Overnight	Delivery date:	Mar 13, 2018 09:16
Special Handling:	Deliver Weekday		

Shipping Information:

Tracking number:	780006592890	Shp date:	Mar 12, 2018
		Weight:	0.5 lbs/0.2 kg

Recipient:
BOARD OF COMMISSIONERS
LEHIGH VALLEY PLANNING COMMISSION
961 MARCON BOULEVARD
SUITE 310
ALLENTOWN, PA 18103 US

Shipper:
BARBARA JONES
EarthRes Group, Inc.
6912 Old Easton Road
PIPERSVILLE, PA 18947 US

Reference 151014.003
Department number Pipersville

Thank you for choosing FedEx.



**GENERAL INFORMATION FORM -- AUTHORIZATION APPLICATION
FOR A RESIDUAL OR MUNICIPAL WASTE GENERAL PERMIT APPLICATION**

Before completing this General Information Form (GIF), read the step-by-step instructions provided in this application package. This version of the General Information Form (GIF) must be completed and returned with any municipal or residual general permit application being submitted to the Department.

Client ID# TBD		APS ID# _____		DEP USE ONLY Date Received & General Notes
Site ID# TBD		Auth ID# _____		
Facility ID# TBD				

CLIENT INFORMATION

DEP Client ID# TBD	Client Type / Code LLC			
Organization Name or Registered Fictitious Name Slate Belt Heat Recovery Center, LLC		Employer ID# (EIN) XX-XXXXXXX	Dun & Bradstreet ID#	
Individual Last Name N/A	First Name	MI	Suffix	SSN
Additional Individual Last Name	First Name	MI	Suffix	SSN
Mailing Address Line 1 435 Williams Court		Mailing Address Line 2 Suite 100		
Address Last Line - City Baltimore		State MD	ZIP+4 21220-2888	Country USA
Client Contact Last Name Goodwin	First Name John	MI	Suffix	
Client Contact Title Vice President - Engineering		Phone 443-489-9069	Ext	
Email Address jgoodwin@SYNAGRO.com		FAX N/A		

SITE INFORMATION

DEP Site ID# TBD	Site Name Slate Belt Heat Recovery Center				
EPA ID#	Estimated Number of Employees to be Present at Site			16	
Description of Site Biosolids Processing Facility					
County Name Northampton	Municipality Plainfield	City <input type="checkbox"/>	Boro <input type="checkbox"/>	Twp <input checked="" type="checkbox"/>	State PA
County Name	Municipality	City <input type="checkbox"/>	Boro <input type="checkbox"/>	Twp <input type="checkbox"/>	State
Site Location Line 1 2100 block of Pen Argyl Rd.		Site Location Line 2			
Site Location Last Line - City Pen Argyl		State PA	ZIP+4 18072		
Detailed Written Directions to Site Take Route 33 to the Route 512 Wind Gap/Pen Argyl exit. Off the exit, turn onto Route 512 North (a right turn from Route 33 Northbound). Follow Route 512 through Wind Gap, turning right at the Turkey Hill in Wind Gap (3rd traffic light) to stay on Route 512. After 1.4 miles, turn right into Grand Central Sanitary Landfill. The entrance to the Slate Belt Heat Recovery Center will be on the right adjacent to the Green Knight Energy Center at 2147 Pen Argyl Road, Pen Argyl, PA.					
Site Contact Last Name Goodwin	First Name John	MI	Suffix		
Site Contact Title Vice President - Engineering		Site Contact Firm Slate Belt Heat Recovery Center, LLC			
Mailing Address Line 1 435 Williams Court		Mailing Address Line 2			
Mailing Address Last Line - City Baltimore		State MD	ZIP+4 21220-2888		
Phone 443-489-9069	Ext	FAX N/A	Email Address jgoodwin@SYNAGRO.com		

NAICS Codes (Two- & Three-Digit Codes – List All That Apply)
562

6-Digit Code (Optional)
562219

Client to Site Relationship
OWNOP Owner/Operator

FACILITY INFORMATION

Modification of Existing Facility

- | | | |
|--|---|-----------------------------|
| 1. Will this project modify an existing facility, system, or activity? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| 2. Will this project involve an addition to an existing facility, system, or activity? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
- If "Yes", check all relevant facility types and provide DEP facility identification numbers below.

Facility Type	DEP Fac ID#	Facility Type	DEP Fac ID#
<input checked="" type="checkbox"/> Air Emission Plant	GKEDC #574507	<input type="checkbox"/> Land Recycling Cleanup Location	
<input type="checkbox"/> Beneficial Use (water)		<input type="checkbox"/> MineDrainageTrmt/LandRecyProjLocation	
<input type="checkbox"/> Captive Hazardous Waste Operation		<input type="checkbox"/> Municipal Waste Operation	GCSL #100265
<input type="checkbox"/> Coal Ash Beneficial Use Operation		<input type="checkbox"/> Public Water Supply System	
<input type="checkbox"/> Coal Mining Operation		<input type="checkbox"/> Radiation Facility	
<input type="checkbox"/> Commercial Hazardous Waste Operation		<input type="checkbox"/> Residual Waste Operation	
<input type="checkbox"/> Encroachment Location (water, wetland)		<input type="checkbox"/> Storage Tank Location	
<input type="checkbox"/> Erosion & Sediment Control Facility		<input type="checkbox"/> Water Pollution Control Facility	
<input type="checkbox"/> Industrial Minerals Mining Operation		<input type="checkbox"/> Other:	

Latitude/Longitude Point of Origin	Latitude			Longitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
CNTAR	40°	51'	34"	-75°	15'	41"

PROJECT INFORMATION

Project Name
State Belt Heat Recovery Center

Project Description

The project involves drying dewatered biosolids to produce a Class A biosolid products that will be beneficially used as a fertilizer blending agent, soil conditioner, and/or a renewable fuel product. No process wastewater will be discharged from the facility. Stormwater will runoff as sheet flow to GCSL's sediment basin #2.

Project Consultant Last Name Pullar	First Name Thomas	MI G.	Suffix P.E.
Project Consultant Title Senior Project Manager	Consulting Firm EarthRes Group, Inc.		
Mailing Address Line 1 P.O. Box 468	Mailing Address Line 2 6912 Old Easton Road		
Address Last Line – City Pipersville	State PA	ZIP+4 18947	
Phone (215) 766-1211	Ext	FAX (215) 766-1245	Email Address TPullar@earthres.com

1. Is this application for an authorization type on the list of authorizations affected by the land use policy? Yes No

Note: If "Yes", you must complete the General Information Form (1300-PM-BIT0001) instead of this form.

COORDINATION INFORMATION

Note: The PA Historical and Museum Commission must be notified of proposed projects in accordance with DEP Technical Guidance Document 012-0700-001 and the accompanying Cultural Resource Notice Form, if applicable.

If the activity will be a mining project (i.e., mining of coal or industrial minerals, coal refuse disposal and/or the operation of a coal or industrial minerals preparation/processing facility), respond to questions 1.0 and 2.0 below.

If the activity will not be a mining project, skip questions 1.0 and 2.0 and begin with question 3.0.

- | | | | | | |
|-----|---|-------------------------------------|-----|-------------------------------------|----|
| 1.0 | Is this a coal mining project? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form. | <input type="checkbox"/> | Yes | <input type="checkbox"/> | No |
| 2.0 | Is this a non-coal (industrial minerals) mining project? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form. | <input type="checkbox"/> | Yes | <input type="checkbox"/> | No |
| 3.0 | Will your project, activity, or authorization have anything to do with a well related to oil or gas production, site development for such activity, or the waste from such a well? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form. | <input type="checkbox"/> | Yes | <input checked="" type="checkbox"/> | No |
| 4.0 | Will the project involve a construction activity that results in earth disturbance? If "Yes", specify the total disturbed acreage. (DEP Use/4x66) | <input checked="" type="checkbox"/> | Yes | <input type="checkbox"/> | No |

4.0.1 Total Disturbed Acreage 6.3 acres

5.0	Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water (including wetlands)? (DEP Use/4x66) (Modify GCSL Sediment Basin #2)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
6.0	Will the project involve discharge of industrial wastewater or stormwater to a dry swale, surface water, ground water or an existing sanitary sewer system or separate storm water system? If "Yes", discuss in <i>Project Description</i> . (DEP Use/4x62) (NPDES permit for stormwater runoff into non-discharging Sediment Basin #2)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
7.0	Will the project involve the construction and operation of industrial waste treatment facilities? (DEP Use/4x62) DOA submitted with this application	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
8.0	Will the project involve construction of sewage treatment facilities, sanitary sewers, or sewage pumping stations? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form. (Authority contacted; grinder pump will convey sanitary wastewater to Pen Argyl Municipal Authority)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
9.0	Is this project for the beneficial use of biosolids for land application within Pennsylvania? If "Yes" indicate how much (i.e. gallons or dry tons per year). (DEP Use/4X62)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
	9.0.1 Gallons Per Year (residential septage)				
	9.0.2 Dry Tons Per Year (biosolids)				
10.0	Does the project involve construction, modification or removal of a dam? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
11.0	Will the project interfere with the flow from, or otherwise impact, a dam? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
12.0	Will the project involve operations (excluding during the construction period) that produce air emissions (i.e., NOX, VOC, etc.)? If "Yes", identify each type of emission followed by the amount of that emission. (DEP Use/4x70)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
	12.0.1 Enter all types & amounts of emissions; separate each set with semicolons.				
	Emission calculations provided in Plan Approval Application under separate cover.				
13.0	Is an on-site drinking water supply (well), other than individual house wells, proposed for your project? If "Yes", complete GIF (1300-PM-BIT0001) instead of this form.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
14.0	Will your project involve purchasing water in bulk, excluding during the construction period? If "Yes", name the provider. Also, indicate the daily number of employees or guests served. (DEP Use/4x81)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
	14.0.1 Provider's Name				
	14.0.2 Number of Employees/Guests				
15.0	Is your project to be served by public water supply? If "Yes", indicate name of supplier and attach letter from supplier stating that it will serve the project. (DEP Use/4x81)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
	15.0.1 Supplier's Name				
	15.0.2 Letter of Approval from Supplier is Attached	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
16.0	Will this project involve a new or increased drinking water withdrawal from a stream or other water body? If "Yes", provide name of stream. (DEP Use/4x81)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
	16.0.1 Stream Name				
17.0	Will the construction or operation of this project involve treatment, storage, reuse, or disposal of waste? If "Yes", indicate what type (i.e., hazardous, municipal (including infectious & chemotherapeutic), residual) and the amount to be treated, stored, re-used or disposed. (DEP/Use4x32)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
	17.0.1 Type & Amount				
	Biosolids: 400 wet tpd (84 dry tpd; 30,660 dry tons / year)				
18.0	Will your project involve the removal of coal, minerals, etc. as part of any earth disturbance activities? (DEP Use/48y1)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
19.0	Does your project involve installation of a field constructed underground storage tank? If "Yes", list each Substance & its Capacity. Note: Applicant may need a Storage Tank Site Specific Installation Permit. (DEP Use/2570)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
	19.0.1 Enter all substances & capacity of each; separate each set with semicolons.				

20.0 Does your project involve installation of an aboveground storage tank greater than 21,000 gallons capacity at an existing facility? Yes No
Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit.
(DEP Use/2570)

20.0.1 Enter all substances & capacity of each; separate each set with semicolons.

21.0 Does your project involve installation of a tank greater than 1,100 gallons which will contain a highly hazardous substance as defined in DEP's Regulated Substances List, 2570-BK-DEP2724? Yes No
Note: Applicant may need a Storage Tank Site Specific Installation Permit. (DEP Use/2570)

21.0.1 Enter all substances & capacity of each; separate each set with semicolons.

22.0 Does your project involve installation of a storage tank at a new facility with a total AST capacity greater than 21,000 gallons? Yes No
Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit.
(DEP Use/2570)

22.0.1 Enter all substances & capacity of each; separate each set with semicolons.
300,000 gal process wastewater tank
5,000 gal sulfuric acid (H₂SO₄) (Acid) Tank
3,000 gal sodium hydroxide (NaOH) (Caustic) Tank
5,000 gal sodium hypochlorite (NaOCl) (Bleach) Tank

CERTIFICATION

I certify that I have the authority to submit this application on behalf of the applicant named herein and that the information provided in this application is true and correct to the best of my knowledge and information.

Type or Print Name John Goodwin

Signature

Vice President - Engineering
Title

Date