

Application Type New  
Facility Type Storm Water  
Major / Minor Minor

**NPDES PERMIT FACT SHEET  
ADDENDUM**

Application No. PA0276120  
APS ID 964362  
Authorization ID 1221963

**Applicant and Facility Information**

Applicant Name	<u>Slate Belt Heat Recovery Center LLC</u>	Facility Name	<u>Slate Belt Heat Recovery Center</u>
Applicant Address	<u>435 Williams Court Suite 100 Baltimore, MD 21220-2888</u>	Facility Address	<u>2100 Block Of Pen Argyl Road Pen Argyl, PA 18072</u>
Applicant Contact	<u>John Goodwin</u>	Facility Contact	<u>John Goodwin</u>
Applicant Phone	<u>(443) 489-9069</u>	Facility Phone	<u>(443) 489-9069</u>
Client ID	<u>341865</u>	Site ID	<u>256036</u>
SIC Code	<u>4953</u>	Municipality	<u>Plainfield Township</u>
SIC Description	<u>Trans. &amp; Utilities - Refuse Systems</u>	County	<u>Northampton</u>
Date Published in PA Bulletin	<u>September 29, 2018 (original) July 13, 2019 (redraft)</u>	EPA Waived?	<u>Yes</u>
Comment Period End Date	<u>November 21, 2018 (original) August 12, 2019 (redraft)</u>	If No, Reason	<u>-</u>
Purpose of Application	<u>Application for a new NPDES permit for discharge of treated Storm Water</u>		

**Internal Review and Recommendations**

**This Fact Sheet Addendum is for a Redraft NPDES Permit due to significant NPDES application revisions.**

**Public Comment Period for First Draft NPDES Permit:** Extended to November 21, 2018 per DEP Management decision to allow full opportunity for public comments on this project involving multiple DEP Programs. Public hearing was already scheduled for November 7, 2018. See future Comment-Response Document for summary of (previously received) public comments plus Department Responses.

**Public Comment Period for Redraft NPDES Permit:** The PA Bulletin notice will be published on July 13, 2019 to allow for any public comments on the Redraft NPDES Permit to be coordinated with the August 12, 2019 PADEP Air Quality Program Public Hearing.

**In terms of NPDES Permit Application Changes:** The Individual NPDES Permit Application revisions consisted of:

- July 1, 2019 Submittal consisting of:
  - Cover Letter
  - Attachment A (Revised NPDES Permit Application Form including Certification page)
  - Attachment B (Revised General Information Form Facility Information Section)
  - Attachment C (NPDES Monitoring Plan) including changes to reflect unfinalized agreement between Plainfield Township and SBHRC.
  - Attachment D (Proposed BMPs) including changes to reflect unfinalized agreement between Plainfield Township and SBHRC
  - Attachment E (Figure 2 (Outfalls and Drainage Areas))

Approve	Return	Deny	Signatures	Date
X			James D. Berger, P.E. / Environmental Engineer	July 10, 2019
X			Amy M. Bellanca, P.E. / Environmental Engineer Manager	
NA	NA	NA	NA – not required for Redraft NPDES Permit Bharat Patel, P.E. / Environmental Program Manager	

**Internal Review and Recommendations**

- Attachment F (Trailer Cut Sheets for “Possum Belly Trailers”)
- June 20, 2019 NPDES Application Revision Submittal, except as superseded by the July 1, 2019 Submittal including:
  - Cover Letter
  - Attachment B (Figure 2 – Outfall and Drainage Area Plan) except as superseded
  - Attachment C (Post Construction Stormwater Management Plans) including:
    - Drawing PCSM-01 (Post Construction Stormwater Management Plan)
    - Drawing PCSM-02 (Post Construction Stormwater Management Notes)
    - Drawing PCSM-03 (Post Construction Stormwater Management Details)
    - Drawing PCSM-04 (Post Construction Stormwater Management Details)
- The November 21, 2018 SBHRC Public Comments on the Draft NPDES Permit included a request for Thermal Pad Containment Area precipitation release option. Other comments superseded by NPDES Permit Application revisions.

**Changes to Previous Draft NPDES Permit Language:**

- **Significant Part A Changes:**
  - **General Updating:** Outfalls locations and drainage areas have been revised due to changes in site grading and stormwater controls as described in the revised application.
  - **Enhanced NPDES Monitoring Plan Requirements:** The NPDES Permit Application revisions included an enhanced NPDES Monitoring Plan (in accordance with the unfinalized agreement between Plainfield Township and SBHRC) with monitoring requirements incorporated into the Redraft NPDES Permit (plus additional Corrective Action Plan commitments discussed below):
    - Quarterly monitoring for first year (after startup i.e. waste acceptance), followed by semi-annual monitoring for Outfall Nos. 001, 002, 003, 004 “unless the site is implementing a CAP, in which case any reduction in monitoring parameters and frequency will be at the discretion of PA DEP”:
      - The Department reserves the right to require additional (quarterly) monitoring if required after the first year by this SBHRC commitment in addition to general Department authority.
      - If SBHRC conducts additional Outfall monitoring for permit-identified constituents, then reporting is required under standard NPDES Permit conditions via the DMR for that reporting period. The IMAX value of all sampling events must be reported for that DMR reporting period.
    - VOC monitoring added to Outfalls Nos. 001, 002, 004, 007 for the first year of operation, followed by reduction to Draft NPDES Permit parameters “unless the site is implementing a CAP, in which case any reduction in monitoring parameters and frequency will be at the discretion of PA DEP”:
      - SBHRC/Plainfield Township-chosen Volatile Organic Compounds a.k.a. VOCs include: 1,1,1-Trichloroethane; 1,1-Dichloroethane; 1,1-Dichloroethene; 1,2-Dibromoethane; 1,2-Dichloroethane; Benzene, cis-1,2-Dichloroethene; Ethyl Benzene; Methylene Chloride; Tetrachloroethene; Toluene; trans-1,2-Dichloroethene; Trichloroethene; Vinyl Chloride; and Xylenes).
      - After the first year, the Department has added monitoring for these parameters “upon request” to address any future monitoring requirement contingency.
    - **Outfall No. 004:** Copper and Nitrate-N monitoring has been added per the NPDES Monitoring Plan (required for first year, upon request for remainder of NPDES Permit Term).
    - **Related Corrective Action Plan (CAP) Requirements triggered by permit limit exceedances:** In the NPDES Monitoring Plan, SBHRC has committed (by NPDES Application incorporated by reference into the NPDES Permit) to resampling of outfalls in event of a permit limit exceedance at the next stormwater sampling event. If resampling indicated continued permit limit exceedance, SBHRC will submit a Corrective Action Plan (CAP) to the Department within 90 days of the end of the DMR monitoring period triggering the need for the plan. **Other CAP-related Agreement language is not incorporated into the NPDES Permit Application. The Department was not party to this agreement and is not granting any relief from NPDES Permit requirements, regulatory requirements, and the statutory requirements to protect the public health, safety, welfare and the environment:**
      - The NPDES Monitoring Plan-referenced General Permit PAG-03 Part C.V.G (benchmarks and Corrective Action Plan process) condition is not part of this Individual IW Stormwater NPDES Permit. Any exceedance of permit limits is noncompliance subject to enforcement action at the Department’s discretion. SBHRC will be required to investigate and take



### Internal Review and Recommendations

- chemicals at both SBHRC and GCSL Inlets identified on Figure 2; Stormwater Inlet IN-4 “isolation flap gate” to capture spills, leaks and releases prior to Outfall No. 001; Entrance Trench and control valve at stormwater inlet IN-3, prior to discharge to Outfall No. 007.
- Requirement for curb or other BMP along paved area/driveway to prevent leaks, spills or releases from entering the No. 006 (HQ UNT watershed) and directing any contaminants to the Outfall No. 008 stormwater inlet BMPs.
  - **Part C.VI.C.2:** Added SOP option for uncontaminated precipitation releases from Thermal Oil Pad containment area.
  - **Part C.VI.D.4:** Added notification requirement for any Basin No. 2 emergency spillway release to host municipality and landfill. Basin regrading will allow for additional water to be directed to the GCSL access road and Penn Argyl Road during >100-Year storm events.
- **Other Changes From Original Application Included:**
    - **Application Form Changes:**
      - Anticipated discharge date: September 2020
      - Estimated 85.6% pervious site area overall.
      - Additional stormwater outfalls/drainage areas explicitly addressed (previously listed in Draft NPDES Permit)
    - **Stormwater Best Management Practices (BMPs) Changes:**
      - Additional vegetated swales to address drainage from truck maneuvering area and parking lots.
      - Install Inserts (ADS Flexstorm or equal) in all stormwater inlets to provide pretreatment of stormwater before discharge to Basin No. 2. The Flexstorm PC “post construction” line of filter bags was said to be designed to specifically target small particle and hydrocarbon removal from parking lots, industrial buildings, and other sites such as gas stations, car washes, and wash bays. The PC filter bags consists of the Flexstorm bag lined with a layer of adsorb-it filter fabric, which removes oil/grease/fuel and polycyclic aromatic hydrocarbons, the layered fabric allows for high flow rates despite it very small opening sizes – as small as 140 sieve. The bags will filter 97% of oil laden runoff at 90 GPM flow rates when properly maintained.
      - Use insert (ADS Cleartec Rubberizer pouch or equal) in all inlets to retain oil and grease in the inlet and prevent discharge to Basin No. 2.
    - **Sediment Basin No. 2 Water Quality Monitoring Plan (May 13, 2019 SBHRC Letter to Plainfield Township):** This plan was not included into the NPDES Permit Application. SBHRC indicates Basin No. 2 water quality monitoring will be addressed in the DEP Waste Management Program permitting.
    - **SBHRC Groundwater Monitoring Plan (May 13, 2019 SBHRC Letter to Plainfield Township):** This plan was not included into the NPDES Permit Application. SBHRC indicates groundwater monitoring will be addressed in the DEP Waste Management Program permitting.
    - **Clarification regarding Public Comments directly relevant to Redraft NPDES Permit (other public comments to be addressed by Final Permit Action Comment-Response Document (consolidating all public comments on all DEP permitting actions):**
      - SBHRC indicates that it is the owner/operator with financial control of this facility.
      - SBHRC indicates it will be using “possum belly trailers” with sealed wastewater tank to transport wastewater from the site. Sludges would be hauled in the upper compartment.
      - SBHRC indicates that it is unaware of any site modifications, required by DEP sister programs, that would require site changes (impacting stormwater management). SBHRC indicated it would notify the DEP Clean Water Program in that event.

**Communication Log:** See Final NPDES Permit Comment-Response Document for summary of public comments/DEP responses received on the previous Draft NPDES Permit. In terms of NPDES Permit Application revisions:

**11/21/2018:** SBHRC public comments on the Draft NPDES Permit (several comments considered NPDES Permit Application clarifications/revisions)

**6/21/2019:** NPDES Permit Application Revisions received (incorporating by reference an “Enhanced NPDES Monitoring Plan” which appears to be contained within a 5/13/2019 SBHRC Letter to Plainfield Township (copied to the DEP Waste Management Program which forwarded an electronic copy to DEP Clean Water Program).

**6/25/2019:** DEP (Berger) E-mail asking for clarification on NPDES Permit Application Revisions

**6/27/2019:** SBHRC Consultant (Tom Pullar, ERG) called to discuss 6/25/2019 E-mail questions on the NPDES Permit Application Revisions. Highlights:

**Internal Review and Recommendations**

- Revised Application: They will get an electronic copy response in by 7/2, hard copies might be later (given holiday and vacations). Updates are needed soon to allow for issuance of the Redraft NPDES Permit in time to allow for public comments to be received at the (scheduled) PADEP Air Quality Public Hearing.
- Future Permitting steps: He said that SBHRC & the Township had not reached agreement on monitoring requirements and might not. I told him the Redraft Permit will go out (incorporating the permit application revisions). The Township will have opportunity to comment on the Redraft NPDES permit. The Final NPDES Permit would be issued in coordination with the DEP sister programs.
- NPDES Monitoring Plan: The Enhanced NPDES Monitoring Plan was incorporated by reference into the NPDES Permit Application and will be incorporated into the Redraft NPDES Permit.
  - The May 13, 2019 SBHRC Letter (to Plainfield Township) included the only known “Enhanced NPDES Monitoring Plan” with enhanced upfront quarterly monitoring and additional constituent monitoring. Those changes are going into the Redraft NPDES Permit (unless SBHRC submits a different Enhanced NPDES Monitoring Plan). The Township might have to agree to any changes.
    - SBHRC indicated it was still negotiating with the Township about monitoring requirements. SBHRC had thought the additional monitoring did not have to be included in the Redraft NPDES Permit (to minimize difficulty of future permit changes).
    - The Department is not likely to relax any Draft NPDES Permit monitoring requirements.
    - SBHRC can ask for changes in outfalls discharging to other outfalls (maybe to monitoring upon request) but those outfalls are monitoring run-on from GCSL and GKEDC drainage areas to help distinguish sources in event pollution is found. The Department could consider changing to monitoring upon request to allow for some flexibility.
  - The May 13, 2019 Letter Basin monitoring and Groundwater monitoring plans were not been incorporated into the NPDES Permit Application by reference, and won't be unless SBHRC requests. SBHRC should contact the DEP Waste Management Program for any feedback on those plans.
- PPC Plan Update: They have made some updates to the previous draft PPC Plan, but nothing significantly impacting stormwater management other than identified in the NPDES Permit Revisions. Therefore, they can wait until facility start-up to submit an updated PPC Plan (meeting NPDES Permit requirements) to the Department Clean Water Program (current Draft NPDES Permit approach).
- Basin Water Usage: He indicated they have been looking at facility needs and might use basin water:
  - Fire-fighting Emergency Usage: The Draft NPDES Permit Part C Special Condition requires onsite equipment at the facility to allow use of basin water to fight major fires at the facility. The Department would require written assurances of the Fire Marshal or an Engineer with Fire Safety Engineering experience to drop that requirement. The Department would have enforcement discretion if any Basin water ended up in the HQ UNT tributary during a major fire incident.
  - Dust Control and other usages: They are now thinking about such usages. The Department would have additional questions for such usages, but they are allowable within the Basin No. 2 drainage area. Perhaps an SOP requirement/option might pertain once SBHRC has a handle on Basin water quality (from its separate monitoring plan) and how they plan to use the basin water.
- Emergency Spill-way route and GCSL inlets enroute to Waltz Creek:
  - Pullar indicated the emergency spillway discharge was to an existing emergency spillway route to Waltz Creek.
  - Previously, the basin did not discharge. It will now discharge (after regrading) via the emergency spillway at >100-year storm events. The Department asked for clarification about the (existing) discharge route to Waltz Creek, and that they check to see if there might be new problems (given no previous discharges) impacting SBHRC, GCSL and Penn Argyl Road. For example, they might have to close roads during major storm events (after regrading) that they did not have to close during similar storm events in the past.

**7/2/2019**: Revised NPDES Permit Application received.

**Table 1 (Stormwater Drainage Areas - Updated)**

Outfall No.	Area Drained	Latitude	Longitude	Description
001	279,692 SF	40° 51' 32.92"	-75° 15' 42.92"	Main SBHRC plant area including building roof drainage, product silos, Truck tipping/receiving units, paved area, driveways, Truck Maneuvering Area, Thermal Oil Pad, and equipment. Application-estimated 14.4% impervious area. Outfalls Nos. 003 and 005 direct stormwater drainage ultimately to this outfall and Basin No. 2.
002	1,551,724 SF	40° 51' 34.22"	-75° 15' 38.00"	Basin No. 2 emergency discharge to Waltz Creek receiving flow from SBHRC and co-located GKEDC and GCSL drainage areas. Application-estimated 32% impervious area for 11,325.6 SF emergency spillway subarea within overall 36-acre Basin drainage area.
003	14,810.4 SF	40° 51' 33.33"	-75° 15' 43.93"	GKEDC stormwater run-on area including buildings, parking lots, driveways, switchgear equipment area plus SBHRC Truck tipping/receiving units, pump gallery and cooling towers area contributing flow to stormwater Inlet IN-1 that directs flow to Outfall No. 001. Application-estimated 100% impervious area
004	1,057,300 SF	40° 51' 31.95"	-75° 15' 38.07"	GCSL Sediment Trap 2 discharge to Basin No. 2, receiving flow from Landfill revegetated cover areas. Application-estimated Zero% impervious area for 70,131.6 SF Sediment Trap subarea within overall ~24-acre drainage area.
005	203,425.2 SF	40° 51' 30.95"	-75° 15' 42.18"	Western drainage area including SBHRC parking area, SBHRC Truck Maneuvering Area, SBHRC Thermal Oil Pad, and SBHRC Process Wastewater Tank & pump house; GKEDC facility run-on; GCSL run-on. Application-estimated 41% impervious area.
006	29,620.8 SF	40° 51' 34.75"	-75° 15' 44.67"	Northern drainage between SBHRC building and access road including: Building roof drainage and "support area runoff"/"ancillary project operations" (cooling towers and a switch gear location) in addition to roof/lawn runoff. Application-estimated 48% impervious area. Discharges to UNT to Little Bushkill River.
007	23,544 SF	40° 51' 34.05"	-75° 15' 36.71"	Eastern drainage area including SBHRC Site entrance, driveway, and grass areas. Application-estimated zero % impervious area.
008	Undefined	40° 51' 34.82"	-75° 15' 38.78"	Eastern drainage area including driveway/paved area (northern side), sewage grinder pump and grass areas (that do not drain into Drainage Area Nos. 006 or 007). Discharges to GCSL Access Road with GCSL Inlets IN-7, IN-8, and IN-9 (with insert BMPs).

**Table 2 (Previous breakdown of drainage areas prior to regrading/new controls)**

Drainage Area	Location	Description
001 (SBHRC)	SW Outfall No. 001 (FKA MP-A)	Discharge to Basin No. 2/Waltz Creek Watershed.  Application-estimated 279,693 square foot (~6.4 acre, 50% impervious) drainage area including Main SBHRC plant area including: Buildings (including roof drainage), product silos, Truck tipping/receiving units, parking lot, driveways, and equipment directed by vegetated swale to stormwater pipe to Sedimentation Basin No. 2. Outfall No. 001 also receives flows from Outfalls No. 003 and 005 upstream monitoring points/drainage areas.

<p>002 (Basin Emergency Spillway)</p>	<p>SW Outfall No. 002</p>	<p>Discharge from Basin No. 2 to Waltz Creek via emergency spillway during &gt;100-year storm event.</p> <p>Application originally estimated total 35.59-acre drainage area for Basin No. 2. Revised Application indicated 11,326 square foot (~0.25 acres, 32% impervious) drainage area consisting of parking lot and grass area not accounted for in other facility Outfall drainage areas.</p>
<p>003 (GKEDC)</p>	<p>SW Outfall No. 003 (FKA MP-B) at <b>relocated GKEDC inlet</b> to stormwater pipe discharging to Outfall No. 001</p>	<p><u>Run-on</u> from portion of GKEDC area directed to Outfall No. 001 (to Basin No. 2/Waltz Creek Watershed. Outfall is internal monitoring point for GKEDC runoff.</p> <p>Application-estimated 14,810 square foot (~0.34 acres, 100% impervious) including GKEDC drainage area buildings, parking lots, driveways, equipment area contributing flow to stormwater piping discharging to Outfall No. 001</p>
<p>004 (GCSL Sed Trap 2 discharge)</p>	<p>SW Outfall No. 004 at <b>GCSL Sed Trap 2</b> (FKA MP-C)</p>	<p><u>Run-on</u> from GCSL landfill area (Sediment Trap No. 2) to Basin No. 2/Waltz Creek Watershed, being monitored to identify any run-on contamination. This is an internal monitoring point to address GCSL run-on into Basin No. 2. GCSL drainage area under separate GCSL NPDES Permit No. PA0070483 (IWTP and stormwater outfalls) that does not have an existing monitoring point at this location.</p> <p>Application originally estimated 1,056,330 square foot (24.25 acre, ~0% impervious) GCSL drainage area (from GCSL Sediment Trap 2). Revised Application estimated 70,132 square foot drainage area (1.6 acres, zero % impervious) grass/lawn area receiving flow from GCSL drainage area (including both capped and active areas). GCSL drainage area estimated at 35.59 acres total to Sedimentation Basin No. 2 (including drainage from other GCSL areas).</p>
<p>005 (SBHRC Maneuvering Area)</p>	<p>"Outfall 005" West side of facility</p>	<p>Stormwater Sheet-flow Discharge to Basin No. 2/Waltz Creek watershed from SBHRC, GKEDC areas, and GCSL drainage areas. Outfall No. 005 discharges to Outfall No. 001.</p> <p>Application estimated 203,425 square foot (4.6 acres; 41% impervious) drainage area including:</p> <ul style="list-style-type: none"> <li>• SBHRC parking area, SBHRC Truck Maneuvering Area and SBHRC Process Wastewater Tank (including discharges of collected noncontaminated precipitation from the tank secondary containment area);</li> <li>• Majority of GKEDC gravel area (including GKEDC Heater and Appurtenances, Waste Heat Recover Units, etc.);</li> <li>• Portion of GCSL drainage area.</li> </ul>
<p>006 (SBHRC northern drainage area to UNT to Little Bushkill Creek)</p>	<p>North of SBHRC building (between building and GCSL access road)</p>	<p>Discharge to UNT to Little Bushkill Creek Watershed (HQ-CWF, impaired for pathogens, subject to antidegradation protections) via existing GCSL roadside drainage channel that receives GCSL Sedimentation Basin No. 7 discharges (and which was originally going to receive Sediment Basin No. 2 GCSL Outfall No. 012 discharges under the GCSL NPDES Permit).</p> <p>The Application estimated a 29,261 square foot area (0.68 acres; 48% impervious) area including: Buildings, parking lots, driveways, equipment (cooling towers and a switch gear location shown on drawing), and grass. There are no industrial activities proposed on the northern or eastern side of the SBHRC facility.</p> <p><u>NOTE:</u> Support areas are generally understood to support industrial activities and will be subject to site PPC Plan requirements. Figure 2B (Existing Drainage Plan) shows the GCSL Sedimentation Basin No. 7 discharges to the ditch (with both an existing GCSL Outfall No. 7 and "Existing SW-12 monitoring Location" at the same general location on the ditch/swale.</p>
<p>007 (SBHRC eastern drainage)</p>	<p>East of Internal Drainage divide (~1.47 acres without basin discharge)</p>	<p><b>Discharge to Sediment Basin No. 2/Waltz Creek Watershed.</b></p> <p>Application estimated 23,544 square foot (0.54 acre; 11% impervious) area including: Eastern drainage area including SBHRC Site entrance, Driveway,</p>

area to Waltz Creek)		sewer grinder pump, and lawn areas discharging to trench drain discharging Sediment Basin No. 2. Monitoring at stormwater inlet.
Total	Total SBHRC Drainage Area (not counting all GCSL/GKEDC run-on areas)	Application estimated 524,898 square feet (12 acres; 14.4% impervious) total SBHRC area.
-	GKEDC site area facing access road, discharging to UNT to Little Bushkill Creek.	<b>Not part of this permit.</b> This area would include any GKEDC drainage area to the UNT from GKEDC building roof drainage (if any), access road, plus <u>upgradient</u> SBHRC area Drainage Area 006 discharge, discharging to UNT to Little Bushkill under the GCSL NPDES Permit.