DOCKET NO. D-1988-052-4

DELAWARE RIVER BASIN COMMISSION

Discharge to a Tributary of Special Protection Waters

Grand Central Sanitary Landfill, Inc.
Industrial Wastewater Treatment Plant Discharge
Plainfield Township, Northampton County, Pennsylvania

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by Grand Central Sanitary Landfill, Inc. (GCSL) on December 20, 2013 (Application), for renewal of the docket holder's existing leachate treatment plant (LTP) and its related discharge. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0070483 for this project was issued by the Pennsylvania Department of Environmental Protection (PADEP) on December 21, 2009, effective on January 1, 2010. The docket holder has applied to the PADEP for a Water Quality Management (WQM) Permit for the reuse/reclamation of site leachate for dust control on roadways, tire wash, and potentially other purposes onsite. PADEP requested additional information from GCSL and will resume its technical review upon receipt of the requested information.

The Application was reviewed for approval under Section 3.8 of the *Delaware River Basin Compact*. The Lehigh Valley Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on June 10, 2014.

A. DESCRIPTION

1. **Purpose**. The purpose of this docket is to renew approval of the docket holder's existing 0.1 million gallons per day (mgd) GCSL LTP and its related discharge. No changes are proposed to the surface water discharge except that a portion of treated effluent may be reused in the future for dust control, tire washing and reuse within the plant. The reuse of effluent for any purpose is contingent upon receiving PADEP approvals.

2. **Location**. The GCSL LTP will continue to discharge treated effluent to the Little Bushkill Creek, which is a tributary of the Bushkill Creek, at River Mile 184.1 – 8.5 – 8.6 (Delaware River –Bushkill Creek-Little Bushkill Creek) via Outfall No. 001 within the drainage area to the Lower Delaware Special Protection Waters (SPW), in Plainfield Township, Northampton County, Pennsylvania as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	40° 50' 43"	75° 15' 48"

3. **Area Served**. The docket holder's existing LTP will continue to serve the 537.9 acre on-site landfill only.

GCSL provides solid waste disposal services to residential, commercial and industrial customers mainly in Pennsylvania and New Jersey. The docket holder's existing LTP does not currently accept, treat, or pre-treat any hydraulic fracturing wastewater from sources in or out of the Basin and is prohibited from accepting, treating/pre-treating any hydraulic fracturing wastewater from sources in or out of the basin in the absence of a docket modification. Approximately one third (1/3) of the waste is from New Jersey and two thirds (2/3) is from Pennsylvania. Approximately 93.2 percent of the waste sent to GCSL originates from sources that are within the Delaware River Basin (DRB). Based on this percentage, it is estimated that 6,800 gpd of the 100,000 gpd LTP effluent generated by the landfill could be attributed to sources that are located outside of the DRB. In accordance with DRBC policy, GCSL will continue to be required to remove 100 percent of the associated Biochemical Oxygen Demand (BOD) waste load from flow sources that are outside of the DRB. For the purpose of defining the Area Served, Section B (Type of Discharge) and D (Service Area) of the docket holder's Application are incorporated herein by reference, to the extent consistent with all other conditions contained in the DECISION Section of this docket.

4. **Physical Features**.

a. **Design Criteria**. The existing LTP is designed to provide the Best Available Treatment (BAT) using a sequencing batch reactor (SBR) treatment system, micro-filtration, and reverse osmosis treatment technology to treat an average flow of 0.1 mgd of leachate from the active and inactive sections of the GCSL. The maximum design capacity will continue to be 0.15 mgd.

The treatment plant is part of an overall leachate management program at the landfill. Due to the quantity and variable nature of leachate generated at the site, the landfill requires several options to accommodate different flow scenarios. Wastewater from the landfill is piped to the LTP where it is treated and discharged to Little Bushkill Creek via outfall No. 001. The reverse osmosis treatment process generates reject water which is spray applied to the working face and lined portions of the landfill. GCSL also trucks a portion of the reverse osmosis reject water to licensed off-site facilities, including the City of Allentown wastewater treatment plant (WWTP) and the Lehigh County Authority WWTP in Fogelsville, Pennsylvania. During periods of abnormally high precipitation, GCSL also transports untreated effluent to these facilities to maintain sufficient capacity in the influent storage facilities. GCSL is also permitted to spray apply treated wastewater and raw leachate to the working face and lined portions of the landfill for dust control, but primarily spray applies the reverse osmosis reject water to the lined areas of the landfill for this purpose.

Previously, under an agreement with the Pen Argyl Municipal Authority, located in Pen Argyl Borough, Northampton County, the GCSL LTP conveyed pre-treated leachate to the Pen Argyl Municipal Authority Wastewater Treatment Plant (WWTP) for treatment and discharge to Waltz Creek. Pre-treated leachate from the GCSL LTP is not presently conveyed to the Pen Argyl Municipal Authority WWTP since currently there is no agreement for the WWTP to receive the pre-treated leachate from the GCSL LTP; however, the docket holder indicated that the agreement may be reinstated in the future. The Pen Argyl Municipal Authority WWTP was most recently approved by DRBC Docket No. D-1975-028 CP-3 on July 11, 2012. The PADEP issued its most recent NPDES Permit No. PA0037052-A1 on March 1, 2012 for this treatment facility. The treatment facility has adequate capacity to receive wastewater from the LTP.

The LTP is designed to remove more than 95% of influent BOD and suspended solids, therefore DRBC's requirement of removing 100% of the BOD waste load that is associated with flow sources that are outside of the DRB can continue to be met, while achieving the Commission's requirement for BOD removal of in-basin waste load of greater than 85%.

b. Facilities. The LTP treatment facilities consist of a plate settler system that includes a pre-mix tank, rapid mix tank, a flocculation tank, and a neutralization tank. From the plate settler system, flow enters into two (2) pre SBR equalization tanks then into two (2) SBR tanks that include the option of carbon addition. From the SBRs, flow enters into two (2) post-SBR equalization tanks, then a PALL microfilter, then a two-pass reverse osmosis unit. Flow enters two (2) post-aeration tanks prior to discharge.

The docket holder's wastewater treatment facility discharges to waters classified as SPW and is required to have available emergency power. The facility has three (3) back-up generators that are automatically activated whenever the facility loses primary power.

The LTP has a remote alarm system that continuously monitors plant operations and alerts facility personnel.

The docket holder's existing wastewater treatment facility has prepared and implemented an emergency management plan (EMP) in accordance with Commission requirements.

The project facilities are not located in the 100-year floodplain.

Wasted sludge will continue to be land-filled onsite.

c. NPDES Permit / DRBC Docket. NPDES Permit No. PA0070483 was approved by the PADEP on December 21, 2009, effective January 1, 2010 and includes final effluent limitations for the project discharge of 0.10 mgd to surface waters classified by the PADEP as high quality cold water fishery (HQ-CWF). The current NPDES permit expires December 31, 2014 and a renewal application is required to be submitted shortly. The following average monthly effluent limits are among those listed in the NPDES Permit and meet or are more stringent than the effluent requirements of the DRBC.

EFFLUENT TABLE A-1: DRBC Parameters Included in NPDES Permit

OUTFALL 001		
PARAMETER	**LIMIT**	**MONITORING**
pH (Standard Units)	6 to 9 at all times	As required by NPDES Permit
Total Suspended Solids	27 mg/l	As required by NPDES Permit
Fecal Coliform	200 colonies per 100 ml as geo average	As required by NPDES Permit
Dissolved Oxygen	6.0 mg/l (minimum at all times)	As required by NPDES Permit
CBOD (5-Day at 20^{o} C) *	25 mg/l (85% minimum removal*)	As required by NPDES Permit
Ammonia Nitrogen*	3.0 mg/l*	As required by NPDES Permit
Total Dissolved Solids**	1,000 mg/l *	As required by NPDES Permit
True color	100 Pt. Co. Units	As required by NPDES Permit

* DRBC Requirement

** See DECISION Condition II.q.

The requirements in EFFLUENT TABLE A-2 are not listed in the NPDES Permit, but are Commission SPW specific parameters that must be met as a condition of this docket approval. Commission staff have requested PADEP include these parameters in their Permit. Monitoring shall continue for each parameter at the frequency specified in the table below (See DECISION Condition II.d.).

EFFLUENT TABLE A-2: DRBC Parameters Not Included in NPDES Permit

OUTFALL 001		
PARAMETER	**LIMIT**	**MONITORING**
Phosphorus	Monitor & Report	Monthly (May through September)
Nitrate as N	Monitor & Report	Monthly (May through September)
Total Nitrogen	Monitor & Report	Monthly (May through September)

e. **Cost**. There are no construction costs associated with this renewal.

B. FINDINGS

The purpose of this docket is to renew the approval of the existing 0.1 mgd GCSL LTP and its related discharge. No changes are proposed to the surface water discharge except that a portion of treated effluent may be reused in the future for dust control, tire washing and reuse within the plant. The reuse of effluent for any purpose is contingent upon receiving PADEP approval.

In 1992, the DRBC adopted SPW requirements, as part of the DRBC *Water Quality Regulations* (*WQR*), designed to protect existing high water quality in applicable areas of the Delaware River Basin. One hundred twenty miles of the Delaware River from Hancock, New York downstream to the Delaware Water Gap has been classified by the DRBC as SPW. This stretch includes the sections of the river federally designated as "Wild and Scenic" in 1978 -- the Upper Delaware Scenic and Recreational River and the Delaware Water Gap National Recreation Area -- as well as an eight-mile reach between Milrift and Milford, Pennsylvania

which is not federally designated. The SPW regulations apply to this 120-mile stretch of the river and its drainage area. (Upper/Middle SPW)

On July 16, 2008, the DRBC approved amendments to its *Water Quality Regulations* (*WQR*) that provide increased protection for waters that the Commission classifies as SPW. The portion of the Delaware River and its tributaries within the boundary of the Lower Delaware River Management Plan Area was approved for SPW designation. (Lower SPW)

Article 3.10.3A.2.e.1). and 2). of the Commission's *WQR* states that projects subject to review under Section 3.8 of the Compact that are located in the drainage area of SPW must submit for approval a Non-Point Source Pollution Control Plan (NPSPCP) that controls the new or increased non-point source loads generated within the portion of the docket holder's service area which is also located within the drainage area of SPW. The docket holder's discharge is located within the drainage area to SPW. Since this project does not entail additional construction and expansion of facilities/service area (i.e. there are not any new or increased non-point source loads associated with this approval), the NPSPCP is not applicable at this time. Accordingly, DECISION Condition II.n. has been included in this docket.

In its application to DRBC, in addition to docket renewal, GCSL requested Commission approval of the reuse of effluent for dust control and vehicle washing. The docket holder has also applied to the PADEP for a WQM Permit for approval of the reuse of treated effluent for use in dust control, tire cleaning and reuse in the plant. GCSL proposes to reclaim the permeate from the first RO unit (RO-1). Effluent that is not reused will continue to be treated through the second RO unit (RO-2) prior to stream discharge. Staff determined that the project does not involve any significant alterations to the facility as the only construction proposed is piping from RO-1 to the effluent storage tanks inside the treatment building. Additionally, the docket holder indicated that the reuse will not result in additional discharges to surface water or groundwater at the site. The reuse of effluent at the site for dust control, tire cleaning and reuse in plant is acceptable contingent upon the docket holder receiving PADEP approval.

DRBC Docket No. D-1988-052-3 required that the docket holder begin sampling for SPW parameters and provided a condition that after 12 months of monthly sampling for the parameters, the docket holder may request of the Executive Director in writing to modify the required monitoring contained within the docket approval. On October 23, 2013 the docket holder submitted 12 months of sampling data and requested approval from the DRBC Executive Director to discontinue the monitoring of phosphorus, nitrate as N and total nitrogen. DRBC staff reviewed the results and determined that a reduction in monitoring frequency to monthly between the months of May through September is appropriate. The docket holder may commence monitoring at the revised schedule upon the approval date of this docket.

The nearest surface water intake of record for public water supply is located approximately 44 River Miles downstream of the docket holder's IWTP on the Delaware River at Point Pleasant, Pennsylvania and is operated by Forest Park Water (North Penn and North Wales Water Authority).

At the project site, Little Bushkill Creek has an estimated seven-day low flow with a recurrence interval of ten years of 0.16 mgd (0.244 cfs). The ratio of this low flow to the average design wastewater discharge from the 0.1 mgd plant is 1.6 to 1.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

The limits in the NPDES Permit are in compliance with Commission effluent quality requirements, where applicable.

The project is designed to produce a discharge meeting the effluent requirements as set forth in the *WQR* of the DRBC.

C. DECISION

I. Effective on the approval date for Docket No. D-1988-052-4 below, Docket No. D-1988-052-3 is terminated and replaced by Docket No. D-1988-052-4.

II. The project and appurtenant facilities as described in Section A "Physical Features" of this docket are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the PADEP in its NPDES Permit and Part II Permit if appropriate, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission's. Commission approval of this docket is contingent on the PADEP's approval of the NPDES and WQM permit.

b. The facility and operational records shall be available at all times for inspection by the DRBC.

c. The facility shall be operated at all times to comply with the requirements of the Commission's *WQR*.

d. The docket holder shall comply with the requirements contained in the Effluent Tables in Section A.4.d. of this docket. The docket holder shall submit the required monitoring results directly to the DRBC Project Review Section. The monitoring results shall be submitted annually, absent any observed limit violations, by January 31. If a DRBC effluent limit is violated, the docket holder shall submit the result(s) to the DRBC within 30 days of the violation(s) and provide a written explanation that states the action(s) the docket holder has taken to correct the violation(s) and protect against any future violations.

e. Except as otherwise authorized by this docket, if the docket holder seeks relief from any limitation based upon a DRBC water quality standard or minimum treatment requirement, the docket holder shall apply for approval from the Executive Director or for a

docket revision in accordance with Section 3.8 of the *Compact* and the *Rules of Practice and Procedure*.

f. If at any time the receiving treatment plant proves unable to produce an effluent that is consistent with the requirements of this docket approval, no further connections shall be permitted until the deficiency is remedied.

g. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

h. Sound practices of excavation, backfill and reseeding shall be followed to minimize erosion and deposition of sediment in streams.

i. The docket holder is permitted to treat and discharge wastewaters as set forth in the Area Served Section of this docket, which incorporates by reference Sections B (Type of Discharge) and D (Service Area) of the docket holder's Application to the extent consistent with all other conditions of this DECISION Section.

j. The docket holder shall discharge wastewater in such a manner as to avoid injury or damage to fish or wildlife and shall avoid any injury to public or private property.

k. No sewer service connections shall be made to newly constructed premises with plumbing fixtures and fittings that do not comply with water conservation performance standards contained in Resolution No. 88-2 (Revision 2).

l. Nothing in this docket approval shall be construed as limiting the authority of DRBC to adopt and apply charges or other fees to this discharge or project.

m. The issuance of this docket approval shall not create any private or proprietary rights in the waters of the Basin, and the Commission reserves the right to amend, suspend or rescind the docket for cause, in order to ensure proper control, use and management of the water resources of the Basin.

n. Prior to allowing connections from any new service areas or any new developments, the docket holder shall either submit and have approved by the Executive Director of the DRBC a NPSPCP in accordance with Section 3.10.3.A.2.e, or receive written confirmation from the Executive Director of the DRBC that the new service area is in compliance with a DRBC approved NPSPCP.

o. Unless an extension is requested and approved by the Commission in advance, in accordance with paragraph 11 of the Commission's Project Review Fee schedule (Resolution No. 2009-2), the docket holder is responsible for timely submittal of a docket renewal application on the appropriate DRBC application form at least 12 months in advance of the docket expiration date set forth below. The docket holder will be subject to late charges in the event of untimely submittal of its renewal application, whether or not DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. In the

event that a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below (or the later date established by an extension that has been timely requested and approved), the terms and conditions of the current docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

p. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

q. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the Rules of Practice and Procedure. In accordance with Section 15.1(p) of the Delaware River Basin Compact, cases and controversies arising under the Compact are reviewable in the United States district courts.

r. The docket holder may request of the Executive Director in writing the substitution of specific conductance for TDS. The request should include information that supports the effluent specific correlation between TDS and specific conductance. Upon review, the Executive Director may modify the docket to allow the substitution of specific conductance for TDS monitoring.

s. Prior to the docket holder initiating any substantial alterations or additions to the existing WWTP as defined in Section 3.10.3A2.a.16) of the Commission's *WQR*, an application must be submitted and approved by the Commission. Such an application shall be submitted prior to final design to ensure that the Commission can provide the docket holder with draft effluent limitations for SPW specific parameters as guidance for design as to not require duplication of work or cause a substantial expenditure of public funds without Commission approval. The docket holder is encouraged to contact the Commission staff during the planning stages to identify the potential effluent limitations required to meet the no measurable change parameters under SPW.

t. The docket holder's LTP is prohibited from treating/pre-treating any hydraulic fracturing wastewater from sources in or out of the Basin at this time. Should the docket holder wish to treat/pre-treat hydraulic fracturing wastewater in the future, the docket holder will need to first apply to the Commission to modify this docket and be issued a revised docket allowing such treatment and an expanded service area. Failure to obtain this approval prior to treatment/pre-treatment will result in action by the Commission.

BY THE COMMISSION

DATE APPROVED: **June 11, 2014**

EXPIRATION DATE: **December 31, 2019**