

Application Type Renewal
Facility Type Industrial
Major / Minor Minor

**NPDES PERMIT FACT SHEET
ADDENDUM**

Application No. PA0070483
APS ID 844825
Authorization ID 1340124

Applicant and Facility Information

Applicant Name	<u>Grand Central Sanitary Landfill, Inc.</u>	Facility Name	<u>Grand Central Sanitary Landfill</u>
Applicant Address	<u>910 Pennsylvania Avenue</u> <u>Pen Argyl, PA 18072</u>	Facility Address	<u>910 Pennsylvania Avenue</u> <u>Pen Argyl, PA 18072</u>
Applicant Contact	<u>Joseph Statile</u>	Facility Contact	<u>Joseph Statile</u>
Applicant Phone	<u>(610) 863-2413</u>	Facility Phone	<u>(610) 863-2413</u>
Client ID	<u>4278</u>	Site ID	<u>256036</u>
SIC Code	<u>4953</u>	Municipality	<u>Plainfield Township</u>
SIC Description	<u>Trans. & Utilities - Refuse Systems</u>	County	<u>Northampton</u>
Date Published in PA Bulletin	<u>February 19, 2022</u>	EPA Waived?	<u>No</u>
Comment Period End Date	<u>March 21, 2022</u>	If No, Reason	<u>Stormwater outfall 003 is subject to the Waltz Creek TMDL</u>
Purpose of Application	<u>Renewal of existing NPDES permit.</u>		

Internal Review and Recommendations

Public notice of draft permit issuance was published in the PA Bulletin on February 19, 2022. Comments were received from the applicant during the extended public comment period. The comments and DEP responses are below. Due to changes made in the permit, another draft permit will be issued.

1. CBOD-5 Influent Monitoring Frequency for Outfall 001

The draft NPDES Permit includes a requirement to monitor influent CBOD-5 on a weekly basis and we request that this be modified to a monthly monitoring requirement, consistent with the DRBC docket issued to the Facility.

Approve	Return	Deny	Signatures	Date
X			<i>Brian Burden</i> Brian Burden, E.I.T. / Project Manager	August 11, 2022
X			Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Environmental Engineer Manager	9-21-22

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Influent monitoring for CBOD-5 is required monthly by the DRBC Docket No. D-1988-052-5 to demonstrate a minimum of 85% reduction of in-basin wastewater CBOD-5 (see excerpt from docket, Effluent Table C-2, below). The docket states that the influent CBOD-5 monitoring and 85% removal is a DRBC requirement not listed in the NPDES permit.

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

OUTFALL NO. 001 (UNT Little Bushkill Creek)		
PARAMETER	LIMIT	MONITORING
CBOD ₅ (at 20° C)	Minimal removal of 85% of in-basin wastewater and 100% of out-of-basin wastewater	Monthly
CBOD ₅ (at 20° C) Influent	Monitor & Report	Monthly

The draft NPDES permit includes influent CBOD-5 monitoring per the DRBC docket, however, at a frequency of once per week. The GCSL leachate treatment plant provides a high degree of treatment as demonstrated over 17 years of operation without an exceedance of the CBOD-5 limits. Sample analysis included with the NPDES application shows CBOD-5 reduction from 4,670 mg/L in the influent to an average of 0.9 mg/L in the effluent.

Monitoring influent CBOD-5 weekly is unnecessary to demonstrate compliance with the DRBC requirement. Therefore, GCSL requests that the monitoring frequency for CBOD-5 in the NPDES Permit be monthly, rather than weekly, consistent with the DRBC docket.

DEP Response: The monitoring frequency is adjusted to 1/month for influent CBOD₅.

2. Monitoring Parameters for Stormwater Outfalls 003 – 009 and 011

The draft NPDES Permit includes monitoring requirements for stormwater Outfalls 003 – 009 and 011. As described in the Fact Sheet accompanying the draft NPDES Permit, the monitoring requirements from Appendix A of stormwater general permit PAG-03 have been included in the permit.

Appendix A of stormwater general permit PAG-03 pertains to Hazardous Waste Treatment, Storage or Disposal Facilities. However, GCSL is a municipal waste landfill and does not accept hazardous waste. As a municipal waste landfill, Appendix C - Landfill and Land Application Sites of PAG-03 would be more appropriate for this Facility. Therefore, GCSL requests that the stormwater monitoring parameters for stormwater Outfalls 003 – 009 and 011 in the draft NPDES Permit be changed from the Appendix A parameter list to the Appendix C parameter list. The monitoring set forth on Appendix C will more accurately reflect the types of constituents associated with GCSL landfill operations and will avoid unnecessary and unwarranted sampling and analysis.

DEP Response: The Appendix A requirements are replaced with Appendix C requirements for all stormwater outfalls. Monitoring/reporting requirements for the Waltz Creek TMDL metals of concern (Copper, Lead, Zinc) remain in the permit for Outfall 003. Monitoring/reporting requirements for Fecal Coliform remain in the permit for all outfalls.

3. Boron Limit for Outfall 001

With the submission of its NPDES Permit renewal application, GCSL requested an increase in the existing effluent limit for boron at the leachate treatment plant (“LTP”) discharge point at Outfall 001. The request was based upon an observed increase in boron levels in the influent to

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the LTP (leachate) over the prior permit term and the resulting inability of the LTP's reverse osmosis unit 1 ("RO-1") to meet the limit on a consistent basis. However, the draft NPDES Permit and Fact Sheet do not include the requested increase in the boron limit or address the anti-backsliding exception.

GCSL reviewed the draft NPDES permit and supporting documentation. Based on that review and further evaluation of the information currently available, GCSL is requesting an increase in the average monthly boron limit. Technical support for this request is provided below and in the attached PowerPoint presentation.

A. GCSL Requests that PADEP Use StreamStats Data to Calculate the WQBEL.

As discussed in our recent call, GCSL requests that PADEP recalculate the WQBEL for boron from the LTP using data derived from the USGS StreamStats program. The request is made since this program is considered new information that was not previously known at the time of the last permit renewal.

The program (<https://streamstats.usgs.gov/ss>) provides a robust data set of flow statistics, including the low flow Q₇₋₁₀ statistic. A more detailed presentation of the requested approach to utilize in calculating the WQBEL is provided in the attached PowerPoint presentation, which we discussed with you during our telephone call on April 14. The StreamStats database is the preferable data source because it is more current and representative than the USGS data used to calculate the limit in the draft NPDES Permit.

B. GCSL's Request to Modify the Boron Limit

Using the StreamStats database, the Q₇₋₁₀ value calculated at the point of discharge for Outfall 001 is 2.64 ft³/s. Utilizing that value in PADEP's Toxic's Management Spreadsheet (Version 1.3, March 2021) results in a calculated WQBEL for boron of 30.3 mg/L.

Even with the higher calculated boron WQBEL, GCSL requests that the Department increase the existing NPDES monthly average permit limit for boron at Outfall 001 from 5.5 mg/L to the 8.9 mg/L. This value is considerably lower than the calculated WQBEL using the StreamStats dataset (30.3 mg/L) and the same WQBEL calculated by the Department in the draft NPDES Permit (8.9 mg/L).

Note that while the boron concentration in RO-1 effluent averaged 6.2 mg/L in 2019, the variability in data (5.44 - 7.7 mg/L, n=4) justifies the proposed increase to 8.9 mg/L to provide a 99% upper confidence limit for the boron concentration.

This proposed modification to the permit limit satisfies the anti-backsliding rule exception in that the StreamStats database constitutes new information that was not available at the time of the prior permit renewal that would have justified a less stringent limit at that time. The exception set forth in 40 CFR 122.44(l)(2)(i)(B) (1) reads:

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(B)(1) Information is available which was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and which would have justified the application of a less stringent effluent limitation at the time of permit issuance;

Based on this new data, GCSL respectfully requests that PADEP modify the boron limit in the draft NPDES Permit to the following:

➤ Average Monthly = 8.9 mg/L (7.4 lbs/day)

The revised Average Monthly Limit will be protective of the instream water quality while allowing for more efficient and sustainable leachate treatment operations.

DEP Response: During the 2016 permit renewal process, a more representative stream gage was utilized to model the discharge and less stringent limitations were recommended for Total Boron. The calculated monthly average WQBEL was 8.9 mg/L as compared to the 4.1 mg/L monthly average WQBEL in the prior permit. At that time, DEP and GCSL agreed to a monthly average limitation of 5.5 mg/L since sampling results indicated that limitation could be consistently met.

Current data from the same stream gage was utilized to model the discharge during this renewal and other modeling parameters were adjusted in accordance with new information on the discharge scenario. Flow data from USGS StreamStats isn't used since the flow estimates were extrapolated with unknown errors (due to the small drainage area of 2.17 mi² and the low stream density of 0.11 mi/mi²). DEP's Toxics Management Spreadsheet calculated the governing monthly average WQBEL as 8.2 mg/L. The same multiplier utilized in the previous renewal to determine the daily maximum limitation will be used.