

**Responsiveness Summary
NYCDEP North River Wastewater Treatment Plant – Air Title V Permit Renewal 2
Application ID: 2-6202-00007/00015
November 1, 2019**

Assessment of Public Comments for Application #2-6202-00007/00015 from New York City Department of Environmental Protection North River Wastewater Treatment Plant, 725 West 135th Street, New York, NY 10031

I. Introduction

On June 22, 2017, New York City Department of Environmental Protection (“NYCDEP”) submitted an application, to the New York State Department of Environmental Conservation (“Department” or “NYSDEC”) to renew its Title V (“TV”) Renewal 1 Permit, Application ID #2-6202-00007/00015 for the NYCDEP North River Wastewater Treatment Plant located at 725 West 135th Street, New York, NY 10031 (“Facility”).

The Facility is a municipal wastewater treatment plant (WWTP) owned and operated by NYCDEP and serves approximately 550,000 people on the west side of Manhattan. The proposed renewal allows for the: 1) continued ongoing operation of the Facility’s three (3) Emission Units, 1-COMBU, 1-COGEN and 2-WWTRE; (2) incorporation all previously-approved modifications for ongoing construction of regulated sources at the Facility, such as the construction and operation of the North River Cogeneration Project; and (3) NYCDEP to decommission the Hydrogen Sulfide (H₂S) monitoring network required as part of a previous permit modification.

On October 26, 2018, The Department issued a Notice of Complete Application (NOCA) for NYCDEP’s North River Wastewater Treatment Plant’s Title V Permit Renewal 2 and major permit modification application, opening a thirty-day comment period on October 31, 2018. On November 6, 2018, NYCDEP published the NOCA in the New York Post, ending the thirty-day comment period on December 6, 2018. NYSDEC received two (2) comment letters from the United States Environmental Protection Agency (EPA) and sixty-four (64) comment letters from the public. The two (2) EPA comments were: a) a November 30, 2018 letter from EPA’s Region 2 Air Programs Branch Permitting Section regarding issues related to nondelegated National Emission Standards for Hazardous Air Pollutants (NESHAPs) and New Source Performance Standards (NSPS); and b) a November 30, 2018 email from EPA’s Region 2 Air Programs Branch, State Implementation Plan (SIP) Section regarding NYSDEC’s Oxides of Nitrogen (NO_x) Reasonably Available Control Technology (RACT) Analysis dated December 30, 2011. The Department has reviewed and responded to all comments within the scope of this permit application. In accordance with 6 NYCRR Part 621.10(e) the Department has prepared this Responsiveness Summary to relevant comments received during the public comment period and hearing. This Responsiveness Summary contains the following information:

- (1) identification of any conditions in the final permit that are different from the conditions in the Draft Permit, and the reasons for the changes, and
- (2) the procedures contained in 6 NYCRR Part 201 that the public must follow if they elect to petition the EPA to object to the issuance of the proposed permit.

The procedures to petition EPA to object to issuance of the proposed permit are:

For the Title V Facility Permit, in accordance with 6 NYCRR Part 201-6.3, the EPA Administrator may object to the issuance of any proposed permit determined by the Administrator not to be in compliance with applicable requirements or requirements of Part 201. No permit shall be issued by the Department if the Administrator objects to its issuance in writing within 45 days of receipt of the proposed permit and all necessary supporting information.

The official review period start and end dates are recorded in EPA's Title V Operating Permits Database

(http://www.epa.gov/region02/air/permit/title_v_database.htm)

If the Administrator does not object to issuance, any person may petition the Administrator within 60 days after the expiration of the Administrator's 45-day review period to make such objection.

The EPA contact information is:

Ms. Suilin Chan, Air Programs Branch, Chief Permitting Section
USEPA REGION 2
290 Broadway
Mail Code: 25TH FL
New York, NY 10007-1866
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Any such petition shall be based only on objections to the permit that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period.

II. List of Individuals that Commented on the NYSDEC Draft Title V Permit

1. EPA Region 2 Air Programs Branch, Permitting Section, received on November 30, 2018;
2. EPA Region 2 Air Programs Branch, SIP Section, received on November 30, 2018;
3. Mitch Bleier, received on November 16, 2018;
4. Alexis Morton, received on November 18, 2018;
5. Preston Stahly, received on November 19, 2018;

6. Orundun DaCosta Johnson, received on November 19, 2018;
7. Carol Margetson, received on November 24, 2018;
8. Wilson and Wilma Valentin, received on November 26, 2018;
9. Erica King-Toler, received on November 26, 2018;
10. Brittny Krone-West, received on November 27, 2018;
11. C.Scott, received on November 29, 2018;
12. Jeannette Myers, received on November 29, 2018;
13. Judelka Diaz, received on November 29, 2018;
14. Mercedes Neafield, received on November 29, 2018;
15. Geraldine McGarvey, received on November 29, 2018;
16. Asha N. Smith, received on November 30, 2018;
17. Andrew Proctor, received on November 30, 2018;
18. Brett Allen, received on November 30, 2018;
19. Sue Acosta-Copeland, received on November 30, 2018;
20. M. F. Beydoun, received on December 3, 2018;
21. Daniel M. Colgan, received on December 3, 2018;
22. Nidia Castillo, received on December 3, 2018;
23. Eugene Ray, received on December 3, 2018;
24. Marleny Rodriguez-Perez, received on December 3, 2018;
25. Jose Jamirez, received on December 3, 2018;
26. Patricia Polanco, received on December 3, 2018;
27. Francisco Mercedes, received on December 3, 2018;
28. Rachel Baily, received on December 3, 2018;
29. Eduardo Gamez, received on December 3, 2018;
30. Silvia Ray, received on December 3, 2018;
31. Celestina Reyes, received on December 3, 2018;
32. Silvia Bodden, received on December 3, 2018;
33. Juan Valeric, received on December 3, 2018;
34. Mayra Pena, received on December 3, 2018;
35. Zinab A. Jebel, received on December 3, 2018;
36. Brenda Thompson, received on December 7, 2018;
37. Bretha Brandon, received on December 3, 2018;
38. Jenny O'Neill, received on December 3, 2018;
39. Kenneth Zaita, received on December 3, 2018;
40. Alfred Hearsa, received on December 3, 2018;
41. Karen Smith, received on December 3, 2018;
42. Sarah Hatcher, received on December 3, 2018;
43. Michael O'Neill, received on December 3, 2018;
44. Gwendolyn Moody, received on December 3, 2018;
45. Pedro O'Brien, received on December 3, 2018;
46. Larissa Flay, received on December 3, 2018;
47. Sharon Kirkpatrick, received on December 3, 2018;
48. Nina Bolsharova, received on December 3, 2018;
49. Keith Copeland, received on December 3, 2018;
50. Terri Marshall-Holder, received on December 3, 2018;
51. Maxine Hunter, received on December 3, 2018;

52. Stephanie Apperio, received on December 3, 2018;
53. Millicent D. Sullivan, received on December 3, 2018;
54. Gwinevere von Ludwig, received on December 3, 2018;
55. Kenneth E. Morton, received on December 3, 2018;
56. Linda D. Lewis, received on December 3, 2018;
57. Kawaine Brown, received on December 3, 2018;
58. Daisy Keepler-Askew, received on December 3, 2018;
59. Jamie Vhahakis, received on December 3, 2018;
60. Glenn C. Motley, received on December 3, 2018;
61. Kwame Addo, received on December 3, 2018;
62. Renee Barnes, received on December 3, 2018;
63. Ruby A. Jeter, received on December 3, 2018;
64. Maria Lopez-Bernstein, received on December 3, 2018;
65. Marie Couwez, received on December 4, 2018;
66. Aude Sun, received on December 4, 2018;

Comments and responses are organized by comment letter and result in three (3) sections: November 30, 2018 letter from EPA Air Programs Branch, Permitting Section; EPA Air Programs Branch, Enforcement Section, and public comments. Within each of these sections, subsections were created to address major comment categories.

November 30, 2018 EPA Region 2 Air Programs Branch, Permitting Section Comment Letter

Five new engines of Emission Unit 1-COGEN

40 CFR Part 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition
Internal Combustion Engines (NSPS 4J)

Comment 1: Condition 48 of the draft permit, which cites to NSPS 4J, includes a list of seven high level NSPS 4J citations but does not include the specific requirements corresponding to those citations that apply to the 5 new engines in the draft permit.

***Response 1:** NYSDEC has revised previously numbered condition 48 by adding emission unit and sources; including language requiring compliance with applicable requirements for emission standards, operating, monitoring and recordkeeping requirements; and to incorporate NSPS 4J requirements. This condition is now renumbered as condition 59. However, NYSDEC has not accepted delegation of NSPS 4J and lacks the legal authority to enforce this regulation. If EPA believes that additional language is required in order for the Facility to comply with NSPS 4J, NYSDEC requests that EPA provide specific requirements/language to be included as a subsequent modification to this permit for this non-delegated NSPS.*

Comment 2: Conditions 52, 53, 54, 58, 59, and 60 of the draft permit contains the NSPS 4J emission standards for NO_x, Volatile Organic Compounds (VOC), and Carbon

Monoxide (CO) that apply to the 5 new engines, although they do not cite to NSPS 4J. These conditions require compliance testing for those pollutants, but do not require the Facility to comply with the NSPS 4J requirements for (1) the initial and subsequent compliance testing; (2) performance testing procedures; and (3) performance test methods.

Response 2: *NYSDEC has added language to the conditions previously numbered 52, 53, 54, 58, 59 and 60 to include NSPS 4J requirements for: (1) the initial and subsequent compliance testing; (2) performance testing procedures; and (3) performance test methods. These conditions are now numbered 63, 64, 66, 70, 71, and 73.*

Comment 3: All of the NSPS 4J emission standards, operational requirements and limitations that apply to the 5 new engines should be included in the draft permit. Furthermore, to ensure compliance with 6 NYCRR 201-6.4(b) (addressing permit conditions for monitoring) and (c) (addressing permit conditions for recordkeeping and reporting of compliance monitoring), the permit should include all NSPS 4J monitoring and recordkeeping requirements that apply to the 5 new engines.

Response 3: *See response to Comment 1.*

Comment 4: Condition 21 of the draft permit indicates that each of the 5 new engines of EU:1- COGEN will be rated at 3.02 megawatts (MW) (or 3,030 kilowatts [kW]), while Condition 30 of the draft permit indicates that each of the 5 new engines of EU:1- COGEN will be rated at 3.37 MW (or 3,370 kW). Please update the above-mentioned conditions (and potentially other draft permit conditions) to ensure that the draft permit includes the correct power rating corresponding to each of the 5 new engines.

Response 4: *NYSDEC has corrected the engine ratings in condition 21 and condition 42 of the permit.*

Major Source of HAP emission status

Comment 5: Based on the information included in the Facility emission summary and supporting emission calculations sections of the North River application, as well as on the actual formaldehyde emissions measured during the stack test performed on the Facility's combustion emissions sources in 2017, North River has the potential to emit over 10 tons per year (tpy) of a single hazardous air pollutant (HAP) (formaldehyde) and over 25 tons per year (tpy) of total HAP emissions. Thus, the Facility has been a major HAP source of emissions even before the addition of the five (5) new engines to its title V permit.

Moreover, North River will continue to be a major HAP source until the 5 existing pump engines stop operation and are removed from the Facility's permit. North River should be considered a major HAP source for purposes of applying any federal regulation to the Facility's emissions sources until the major HAP source of the Facility changes.

Also, the Facility emission summary table on page 32 of the PRR should be updated to reflect the major HAP source status of the Facility.

Response 5: *While the Waste Resource Recovery Facility (WRRF) has a potential to emit greater than 10 tons of formaldehyde on a rolling 12-month basis, actual emissions reflect that the WRRF has not emitted more than 10 tons of formaldehyde on a rolling 12-month basis since 2008, where the WRRF's blower and pump engines were the primary sources of formaldehyde emissions. The 2017 stack test results indicated the blower engines' formaldehyde emissions were 0.087 to 0.157 lb/MMBtu, significantly higher than the pump engines' formaldehyde emissions of 0.039 to 0.089 lb/MMBtu. As of January 2018, the WRRF's blower engines have ceased operation and NYSDEC has removed all references to these air contamination sources from the permit. Therefore, the WRRF is no longer a major source of HAPs.*

NYSDEC has also updated page 32 of the PRR by removing Blower Monitoring.

Four New Interim (INT) Emergency Generators (EGs) of EU: 1-COGEN
40 CFR Part 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE) (NSPS 4I)

Comment 6. Condition 62 of the draft permit cites 40 CFR § 60.4205(b) (which is a NSPS 4I citation) and states that the 4 new identical INT EGs are subject to the emission standards for new nonroad CI engines in 40 CFR §§ 89.112 and 89.113 but does not include those emission standards as applicable requirements. The NSPS 4I emissions standards that apply to the 4 new identical INT EGs are specified in the supporting calculation section of the application. Please revise the draft permit to add these applicable requirements.

Response 6: *NYSDEC has added condition 77 that includes the emission standards in 40 CRF 60.4205 (b).*

Comment 7. Conditions 33, 34, 35, and 36 of the draft permit, which cite to NSPS 4I, do not specify the emission unit, processes, and emission sources to which these conditions apply. The permit should be updated to address this issue. If the NSPS 4I requirements in the above-listed conditions apply to the 4 new INT EGs, please revise the draft permit to specify that those conditions apply to the 4 new INT EGs.

Response 7: *NYSDEC has revised the conditions previously numbered 33, 34, 35 and 36 to specify information related to emission sources. These conditions have been renumbered as 45, 46, 47, and 48.*

Comment 8. Condition 66 of the draft permit indicates it that applies to the 4 new INT EG and contains requirements from 40 CFR §§ 60.4211(f)(2)(ii) and (iii). However, these two provisions were vacated by the D.C. Circuit in 2015. *Delaware v. EPA*, 785 F.3d 1; see also "EPA's Guidance on Vacatur of RICE NESHAP and NSPS Provisions

for Emergency Engines” dated April 15, 2016. Please revise condition 66 to address this issue.

Response 8: *NYSDEC has removed this condition.*

Comment 9. Permit should include emission standards, operational requirements, monitoring and record keeping requirements of NSPS 4I.

Response 9: *NYSDEC has incorporated the requirements of Non-delegated NSPS 4I. Because NYSDEC has not accepted delegation of NSPS 4I and lacks the legal authority to enforce this regulation, NYSDEC requests that, if EPA would like more tailored conditions, that EPA provide specific requirements/language to be included as a subsequent modification to this permit for this non-delegated NSPS.*

Comment 10. 40 CFR Part 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (NESHAP 4Z).

The 4 new INT EGs are also subject to NESHAP 4Z as new emergency generators with a site rating of more than 500 HP located at a major source of HAP emissions. Pursuant to 40 CFR § 63.6590(b)(1)(i) (“Stationary RICE subject to limited requirements”), “a new emergency generator with a site rating of more than 500 HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified at 40 CFR § 63.6640(f)(2)(ii) and (iii), does not have to meet the requirements of NESHAP 4Z and of NSPS Subpart A except for the initial notification requirement of 40 CFR § 63.6645(f).” Based on the draft permit and application, it seems that the 4 new INT EG would be subject to the limited requirements at 40 CFR § 63.6590(b)(1)(i). However, the Facility should confirm that this is the case. Please add the initial notification provisions specified at 40 CFR § 63.6645(f) as an applicable requirement to the permit for the 4 new INT EGs.

Response 10: *Because the WRRF’s blower engines ceased operation in January 2018 and NYSDEC has removed all references to these air contamination sources from the permit, the WRRF is not a major source of HAPs. Therefore, NESHAP 4Z (Subpart ZZZZ) requirements for major sources are not applicable. The Facility will comply with NESHAP 4Z by complying with the NSPS 4I requirements. NYSDEC has added a new condition, condition 82, to include the requirements of 40 CFR 63.6590(c).*

Regardless, NYSDEC has added condition 83 for the initial notification provisions under 40 CFR 63.6645(f).

Opacity and Particulate Emissions Limits

Comment 11. Existing Enclosed Waste Digester Gas Burner (Flare). Conditions 47 and 84 of the draft permit cite to 6 NYCRR 227-1.3(a) and require compliance with the opacity limits of 6 NYCRR 227-1.3(a) for the processes and emission points of EU:1-COMB, including process FLA and emission point FLARE, which is associated with the existing enclosed waste digester gas burner or existing flare at the Facility. However, as confirmed by the NYSDEC's headquarters, flares are subject to opacity requirements at 6 NYCRR 212-1.6. As such, please revise the draft permit to require North River to comply with 6 NYCRR 212-1.6 opacity limit for its existing flare in lieu of requiring compliance with the 6 NYCRR 227-1.3(a) opacity limit. Also, the draft permit should be revised to address the 6 NYCRR 212-2.4 particulate matter emissions limit that would apply to the existing flare.

Comment 12. New Enclosed Waste Digester Gas Burner (Flare). The 6 NYCRR 212-1.6 opacity limit and the 6 NYCRR 212-2.4 particulate emissions limit that would apply to the new enclosed waste digester gas burner or new flare identified as emission source WGBR2 of EU:1-COGEN are omitted from the draft permit. Please revise the permit to address this issue.

Responses 11 and 12: NYSDEC has amended the permit to reflect that flares are control devices and are therefore not subject to 6 NYCRR Part 212 or Subpart 227-1. Instead, the flares are subject to regulation under 200.7 and 211.2 opacity standards.

Comment 13. Five New Engines and 4 New INT EGs. The 6 NYCRR 227-1.3(a) opacity limit and the 6 NYCRR 227-1.2 particulate emissions limit that would apply to the 5 new engines and the 4 new INT EG of EU:1-COGEN are omitted from the draft permit. Please revise the permit to address this issue.

Response 13: NYSDEC has revised the permit to include opacity limits under 6 NYCRR 227-1.3(a) and particulate emissions limit under SIP approved 227.2(b)(1) for relevant sources/processes.

Pump and Blower Engines of EU:1-COMB

Comment 14: Federal air regulatory requirements that apply to the 5 pump engines of EU:1-COMB, each rated at 1,700 HP and which are permitted to combust digester gas, natural gas, and #2 fuel oil, were omitted from the draft permit. The pump engines are subject to NESHAP 4Z and may also be subject to NSPS 4I or NSPS Subpart JJJJ. Applicability of these federal standards depends on information that 6 NYCRR 201-6.2(d)(3) requires be included in the application, but that is missing from the application. Specifically, the application does not provide the manufacture, modification or reconstruction date of each engine, the commence construction date of each engine, or each engine's type (compression ignition, spark ignition, lean or rich burn, two-stroke, or four-stroke). EPA recommends that the application be updated to include the above-mentioned information. The draft permit should include the applicable requirements of

NSPS 4I, NSPS 4J and/or NESHAP 4Z for the 5 pump engines. (Note that the same is true for the 5 blower engines if North River decides to retain them in its title V permit.)

Response 14: *The pump engines were listed in the renewal application as Delaval Transamerican R-46 engines and the blower engines were listed as Mirrlees-Blackstone K5 engines. These pump/blower engines were installed in late 1980's, therefore, they are not subjected to the NSPS Subpart IIII. These pump/blower engines are also compression ignition and therefore not subject to NSPS JJJJ. Since all the WRRF's blower engines ceased operation in January 2018 and NYSDEC has removed all references to these air contamination sources from the permit., the WRRF is not a major source of HAPs and, therefore, NESHAP 4Z requirements for major sources may not apply.*

In addition, the Permit Review Report (PRR) identifies specifications for the pump engines.

Emergency Engines of EU:1-COMB

Comment 15: Trailer-Mounted EG and Black start EG. The one trailer-mounted diesel fired EG rated at 2,000 kW, and the black start diesel fired EG rated at 200 kW at the Facility could be subject to either 1) NSPS 4I and NESHAP 4Z or 2) only NESHAP 4Z. Applicability of these federal standards depend on information that 6 NYCRR 201-6(d)(3) requires be included in the application, but that is missing from the application. Specifically, the permit application should include the manufacture date, modification or reconstruction date, and construction commencement date for each EG. EPA recommends that the application be updated to include the above-mentioned information. The draft permit should include the applicable requirements of NSPS 4I and/or NESHAP 4Z for the 2 EGs.

Response 15: *The NR trailed-mounted generator and black start generator were installed before 2007 and, therefore, are not subject to the NSPS Subpart IIII. Due to age of these engine generators, the Applicant NYCDEP was not able to locate these engine generators' original information. However, because all of the WRRF's blower engines ceased operation in January 2018, North River WRRF is not a major source of HAPs and therefore NESHAP 4Z requirements for major sources are not applicable.*

In addition, because 4Z is a nondelegated NESHAP and because NYSDEC lacks the legal authority to enforce this regulation, NYSDEC requests that, if EPA would like more tailored conditions for the area source provisions of NESHAP 4Z, that EPA provide specific requirements/language to be included as a subsequent modification to this permit for this non-delegated NESHAP.

Comment 16. Emergency Generators - List of Exempt Activities. The List of Exempt Activities included in North River's application indicates that there are 3 EGs at the Facility. Those EGs are subject to NESHAP 4Z and may also be subject to either NSPS

4I or NSPS 4J. Applicability of these federal standards depends on information that is missing from the application, namely, the manufacture date and modification or reconstruction date of the EG, and the type of fuel combusted. EPA recommends that the application be updated to include the above-mentioned information. The draft permit should include the applicable requirements of NSPS 4I or NSPS 4J and/or NESHAP 4Z for the 2 EGs. As we have previously expressed to the NYSDEC in comments provided on other title V draft or proposed permits, sources which are subject to applicable requirements cannot be excluded from title V permitting requirements as exempt or insignificant sources.

Response 16: *The NR trailed-mounted generator and black start generator were installed before 2007; therefore, they are not subject to the NSPS IIII. However, because all of the WRRF's blower engines ceased operation in January 2018 and NYSDEC has removed all references to these air contamination sources from the permit, the WRRF is not a major source of HAPs and, therefore, NESHAP 4Z requirements for major sources are not applicable.*

In addition, because 4Z is a nondelegated NESHAP and because NYSDEC lacks the legal authority to enforce this regulation, NYSDEC requests that, if EPA would like more tailored conditions for the area source provisions of NESHAP 4Z, that EPA provide specific requirements/language to be included as a subsequent modification to this permit for this non-delegated NESHAP.

Emission Limitations for Potential to Emit of EU:1-COGEN

Comment 17. Fuel Monitoring. Conditions 42, 43, 44, 45, 46, 54, and 59 of the draft permit, which establish limits on the PTE of NO_x, Particulate Matter 2.5-10 micrometers in diameter (PM₁₀), VOCs, Particulate Matter that has a diameter of less than 2.5 micrometers (PM_{2.5}) and CO for EU:1-COGEN, indicate that the actual amount of each type of fuel that would be combusted by each one of the 5 new engines, the new flare, and each of the 4 new INT EGs of EU:1-COGEN should be used in determining compliance with the emission limits for the above-listed pollutants. To ensure that the emission limits are practically enforceable, consistent with the NYSDEC DAR-17 Guidance, the draft permit should also include separate conditions requiring the Facility to continuously monitor the amount of fuel combusted by each of the emission sources in EU:1-COGEN. Please add such conditions to the draft permit.

Response 17: *NYSDEC has revised the permit to include fuel usage capping compliance certification conditions for Emission Unit EU: 1-COGEN under Applicable Federal Requirement 6 NYCRR 201-7.1 for processes cogen engine firing digester gas and natural gas as an alternative fuel (COD), cogen engine firing only natural gas (CON), and waste gas burner firing digester gas (WGB).*

Comment 18. Energy Efficiency Factor (EEF). Conditions 42, 43, 44, 45, 46, 54, and 59 of the draft permit, which establish limits on the PTE of NO_x, PM₁₀, VOC, PM_{2.5} and CO for EU:1-COGEN, indicate that an EEF of 8,066 BTU/kW-hr for each of the 5

new engines should be used in determining compliance with the emission limits for the above-listed pollutants. To ensure that the above-mentioned emission limits are practically enforceable, consistent with the NYSDEC DAR-17 Guidance, the draft permit should include a condition requiring the Facility to verify periodically that the actual EEF remains at the level specified in the permit of 8,066 BTU/kW-hr.

Also, EPA notes that the EEF of 8,066 BTU/kW-hr included in the above-listed conditions is greater than the EEF of 7,895 BTU/kW-hr used in the application. Please ensure that the rationale for the difference between the two EEF values is included in the permit record.

Response 18: *NYSDEC based the original Title V permit application emissions calculations on a larger cogeneration engine (3.37 MW with EEF of 8,066 Btu/kW) for a conservative emissions analysis since the specific engines had not been selected at the time of the initial permit application submission on January 31, 2013 and subsequent approval on October 17, 2014. Since, the actual engines are smaller in size than the engines used to develop the potential-to-emit (PTE) emissions and subsequent emission caps, there are no increases in emissions due to the higher range in the efficiency factors and the emission caps remain unchanged.*

However, in order to verify the EEF of the Cogen engines, NYSDEC has added a compliance certification condition, condition 53, to the permit for Emission Unit EU: 1-COGEN under Applicable Requirement 201-6.1(a).

Comment 19. Digester Gas High Heating Value (HHV). Conditions 42, 43, 44, 45, 46, 54, and 59 of the draft permit, which establish limits on the PTE of NO_x, PM₁₀, VOC, PM_{2.5} and CO for EU:1-COGEN, indicate that the Facility should use (1) a digester gas HHV of 850 MMBTU/MMCF when calculating the actual emissions of each of the 5 new engines and determining compliance with the emission limits for the above-listed emission pollutants; and (2) a digester gas HHV of 690 MMBTU/MMCF when calculating the actual emissions of the new flare and determining compliance with the emission limits for the above-listed pollutants.

Further, condition 40.4 of the draft permit specifies a digester gas HHV of 630 MMBTU/MMCF for the new waste gas burner. To ensure that the above-mentioned emission limits are practically enforceable, consistent with the NYSDEC DAR-17 Guidance, the draft permit should include a condition requiring the Facility to verify periodically that the actual digester gas HHVs combusted by the 5 new engines and by the new flare remain at the levels specified in the above-mentioned conditions.

Also, please provide the rationale for the following:

- the difference between the HHV of the digester gas combusted by: a) the 5 new engines; and b) the new flare; and
- the difference between the HHV of the digester gas combusted by the new flare in: a) Conditions 42 through 46, 54, 59; and b) Condition 40.4.

Please update the draft permit conditions to contain the appropriate digester gas HHVs.

Response 19: *The 630 Btu/kW-hr listed in condition 40.4 is a typo and NYSDEC has corrected the typo to 690 Btu/kW-hr. Based on the results of the samples tested at the Facility, the digester gas HHV value ranges between 690 and 750 Btu/kW-hr. The emission factors (lb/MMcf) in each cap compliance formula was calculated assuming the worst-case scenario and are one of the key parameters to determine compliance with the set emission caps in the permit. The Permit now requires stack testing to show the emission factor (lb/MMcf), which will be used in a compliance formula in order to demonstrate compliance with the emission caps. The Facility will adjust the gas to air ratio in the engines to compensate for variable HHV. There are no increases in emissions due to the reduced HHV and the emission caps remain unchanged. See Attachment B-1 for sample emissions calculations.*

NYSDEC has updated conditions 54-58 to verify HHV of the digester gas during stack testing.

Comment 20. Performance Tests for the New Flare. Conditions 42, 43, 44, 45, 46, 54, and 59 of the draft permit establish limits on the PTE of NO_x, PM₁₀, VOC, PM_{2.5} and CO for EU:1-COGEN and require the use of the NO_x, CO and VOC flare manufacturer's emission factors and the US EPA AP-42 PM₁₀ and PM_{2.5} emission factors for calculating the actual emissions resulting from the new flare. However, the draft permit does not require a performance test to verify that those emissions factors will not be exceeded. To ensure that the above-mentioned emission limits are practically enforceable, consistent with the NYSDEC DAR-17 Guidance, the draft permit should require the Facility to conduct initial and subsequent performance tests for the NO_x, PM₁₀, VOC, PM_{2.5} and CO emissions resulting from the new flare.

Furthermore, since the destruction efficiency of the new flare depends on whether the new flare is maintained and operated continuously within the operating temperature range recommended by the manufacturer, we recommend that the permit include conditions:

- To establish the operating temperature range recommended by the manufacturer as a permit limit;
- To require the Facility to measure, on a continuous basis, the waste gas burner operating temperature;
- To require that the flare be operated with a flame present (pilot light) at all times when digester gas is vented through it, and that the presence of a flare pilot flame be monitored using a thermocouple or other equivalent device to detect the presence of a flame.

Response 20: *NYSDEC has revised the permit conditions numbered 54-58 to require performance tests to verify the NO_x, PM₁₀, VOC, PM_{2.5} and CO*

emissions factors. NYSDEC has added a new condition, condition 85, under 201-6.1(a) to include the operating parameters of the new flare. The permit requires NYCDEP to maintain all of their equipment and maintain manufacturer' specified operating parameters within the specified ranges.

Digester Gas Treatment Process and Oxidation Catalysts - Five New Engines

Comment 21: Digester Gas Treatment Process. The description sections of conditions 42, 43, 44, 45, 46, 54, and 59 of the draft permit, which establish limits on the PTE of NO_x, PM₁₀, VOC, PM_{2.5} and CO for EU:1-COGEN, and the application both state that the 5 new engines would combust treated digester gas. Since there is no information regarding the digester gas treatment process in the application, EPA recommends that the Facility provide for the permitting record a detailed description of the digester gas treatment process, including:

- Which contaminants are in the digester gas after it is released from the anaerobic digester and how the digester gas treatment process removes those contaminants; and
- A description of the equipment used in the digester gas treatment system, the control efficiency of the equipment used, and any other supporting information including the vendor guarantees.

Response 21: *As mentioned above in Response 20, digester gas treatment is not required for the operation for the selected cogeneration engines and, therefore, there is no pretreatment system. The digester gas Siloxane and H₂S levels in the digester gas, as shown in Attachment B-2, are within the required manufacturer specified characteristics of H₂S and Siloxanes at 400 ppm and 900 ppb, respectively.*

NYSDEC has revised permit conditions 54-58 to require verification of digester gas Siloxane and H₂S levels during the stack test.

Comment 22. Oxidation Catalyst. The description section of Condition 30 of the draft permit and the application, both, state that the 5 new engines will use oxidation catalysts to control CO, VOC and formaldehyde emissions. Further, the Facility indicated in the supporting calculations section of its application that both the CO and VOC emissions factors used to determine the PTE of CO and VOC for the 5 new engines, and the CO and VOC emission caps in the draft permit, assume that the 5 new engines' emissions would be controlled by the oxidation catalyst. Thus, EPA recommends that the following information from the oxidation catalysts manufacturer be included in the permitting record:

- The CO, VOC and formaldehyde destruction efficiency guarantees;

- The level of siloxane and level of H_2S in the digester gas at which the oxidation catalyst manufacturer guarantees the CO, VOC, and formaldehyde destruction efficiency. This is because it is well known that the contaminants found in the digester gas combusted in the engines, including but not limited to siloxanes and hydrogen sulfide (H_2S), affect the performance of the engines, especially of the oxidation catalysts; and
- A list of the operating parameters values for the oxidation catalyst (such as pressure drop across the catalyst and catalyst inlet temperature) that the Facility should continuously monitor to ensure continuous compliance with the CO, VOC and formaldehyde destruction efficiency.

Response 22: *Rather than destruction efficiency, the permit has the following limit:*

The oxidation catalyst manufacturer provides guarantees for allowable emission rates from the engine exhausts and these manufacturer guarantees are lower than the emission limits in the draft permit, which will be verified during the stack test.

<i>Pollutant</i>	<i>Emissions limits not to exceed (after oxidation catalyst controls)</i>
<i>CO (g/bhp-hr)</i>	<i>0.50</i>
<i>VOC (g/bhp-hr)</i>	<i>0.15</i>
<i>Formaldehyde (g/bhp-hr)</i>	<i>0.02</i>

The manufacturer provides guarantees for allowable CO emission of 0.5 g/bhp-hr while permit Condition 58's compliance formula allows the permit application's estimated emission factor. The Permit now requires stack testing to show the emission factor (lb/MMcf), which will be used in a compliance formula in order to demonstrate compliance with the emission caps.

In addition, the manufacturer specified digester gas characteristics are H_2S and Siloxanes at 400 ppm and 900 ppb, respectively. The above emission factors for CO, VOC, and Formaldehyde are guaranteed by the manufacturer under these conditions. As a result, NYSDEC has revised permit conditions 55-59 and 67 to require verification of the H_2S and Siloxane numbers during stack testing.

The permit requires that NYCDEP maintain all its equipment and comply with all manufacturer-specified operating parameters within the ranges specified in the permit. The engines will be equipped with a catalyst monitor for the inlet/outlet temperatures and the catalyst inlet/outlet pressures, including the differential. See Attachment B-3 for details of the catalyst monitor system. The Facility is not required to monitor pressure drop and as mentioned in the manufacture specifications the pressure drop change across the operating range is minimal. The system design temperature requires a minimum temperature of 727°F while operating on digester gas and requires a minimum temperature of 714° F while operating on natural gas. The system is designed to operate with minimal effect in operation up to a maximum operating temperature of 1247°F. The permit requires

NYCDEP to keep records at the Facility and to make these records available upon request.

Draft Permit Conditions

Comment 23: To ensure that the emission limits on the PTE of CO and VOCs established in the draft permit are practically enforceable, consistent with the NYSDEC DAR-17 Guidance the draft permit should include permit conditions requiring the Facility to:

- Install, operate, and maintain oxidation catalysts on the 5 new engines to achieve a minimum of [enter the % from the oxidation catalyst manufacturer] reduction of CO emissions and a minimum of [enter the % from the oxidation catalyst manufacturer] reduction of VOC emissions;
- Install gauges before and after each oxidation catalyst in order to monitor pressure drop across the catalyst. The pressure drop across the catalysts shall not change by more than [enter the no. of inches of water from the manufacturer] from the pressure drop across the catalyst measured during the initial performance test;
- Install thermocouples before each oxidation catalyst in order to monitor the inlet temperature of the catalyst for each engine;
- Maintain the engine exhaust temperature at the inlet to each catalyst at all times the engines operate within the following limits: [enter the temperature values from the manufacturer];
- Follow, for each engine and its respective catalyst, the manufacturers' recommended maintenance schedule and procedures to ensure optimum performance of each engine and catalyst;
- Monitor the content of the treated digester gas before combustion in each of the 5 new engines. The siloxane content in the treated digester gas fed to each of the 5 new engines shall not exceed [enter siloxanes ppm limit from the oxidation catalysts manufacturer] and the H_2S content in the treated digester gas fed to each of the 5 new engines shall not exceed [enter the H_2S ppm limit from the oxidation catalyst manufacturer].

Response 23: *The permit requires NYCDEP to maintain all of their equipment and maintain manufacturer' specified operating parameters within the specified ranges.*

As discussed in Comment 23, the oxidation catalyst manufacturer provides guarantees for allowable emission rates from the system. As per the manufacturer guarantees, the stack exhaust emissions limits would not exceed these levels after oxidation catalyst controls. Conditions 63 and 64 in the permit include stack

emissions testing requirements. As required, an initial performance test will be conducted following by subsequent performance tests.

The Facility is not required to monitor pressure drop. However, as indicated in Attachment B-3, the engines will be equipped with a catalyst monitor to continuously monitor catalyst pressure differentials and inlet/outlet temperatures and records will be kept on site and available upon request. The system design temperature requires a minimum of 727°F while operating on digester gas and 714°F while operating on natural gas. The system is designed to operate with minimal effect in operation up to a maximum operating temperature of 1247°F.

NYSDEC has revised permit condition 52 under 6 NYCRR 201-6.1(a) to include the following compliance certification for Emission Unit EU: 1-COGEN, emission sources COGN1, COGN2, COGN3, COGN4, COGN5: “A continuous parameter monitoring system (CPMS) will be installed to continuously monitor catalyst inlet and outlet temperatures, and differential pressures. Records will be kept at the Facility and available upon request.” The engines and their catalyst systems would be operated and maintained according to manufacturer’s instructions for optimum performance within applicable design ranges.

VOC and Formaldehyde Emissions

Comment 24: Based on 6 NYCRR Part 200, emissions of formaldehyde fall within the definition of VOC. Thus, Condition 44 of the draft permit, which establishes a 24.5 tpy limit on the VOC emissions limit of VOC emissions from EU: 1-COGEN, should be updated to require that formaldehyde emissions be included in the calculation of the actual VOC emissions when determining compliance with the VOC emission limit.

Response 24: *NYSDEC has updated the PRR to clarify that NYSDEC included formaldehyde emissions in the calculation of actual VOC emissions.*

Condensable Particulate Matter

Comment 25: 6 NYCRR Part 231 defines “PM10” and “PM 2.5” as the sum of the filterable and condensable fractions of PM10 and PM 2.5, respectively. The draft permit should be updated to (1) be clear that the limits on PM10 and PM 2.5 emissions for emission unit EU:1-COGEN include condensable PM10 and PM2.5; (2) require the Facility to conduct its performance tests for both condensable and filterable PM10 and PM2.5; and (3) account for both condensable and filterable PM10 and PM2.5 when determining compliance with the permit limits on PM10 and PM2.5 emissions for EU:1-COGEN.

Response 25: *NYSDEC has updated the PRR to include this information.*

Continuous Opacity Monitors

Comment 26. Condition 29 of the draft permit, citing to 6 NYCRR Part 227-1.3(a), is marked as an applicable federal requirement and refers to keeping records of measurements related to a continuous opacity monitoring system (COM). Please revise this condition by specifying the emission unit, processes, and emission sources to which this condition applies. Please include in the PRR a brief discussion regarding the COM provisions of 6 NYCRR 227-1.3(a) referenced by Condition 29 and why those COM provisions would apply to the emission sources at the Facility.

Comment 27. Conditions 90, 91, 93, and 96 of the draft permit, citing to 6 NYCRR 211.2, are marked as applicable state requirements and refer to the COM. Please specify for each of the above- listed conditions the emission unit, processes, and emission sources to which those conditions apply. Please include in the PRR a brief discussion regarding the COM provisions of 6 NYCRR 211.2 that are referenced by the above listed conditions and why those COM provisions would apply to the emission sources at the Facility.

Response 26 & 27: NYSDEC renumbered permit conditions 90, 91, 93, and 96 as 28, 29, 31, and 34; and condition 29 as condition 41 and has revised these conditions to include emission unit, process, and source.

40 CFR Part 64 - Compliance Assurance Monitoring (CAM Rule).

Comment 28: The applicability of the CAM Rule must be considered at this Facility because the Facility uses emission control devices with federally enforceable emission limits. The control devices are the oxidation catalysts used to control the CO and VOC emissions resulting from each of the 5 new engines of EU:1-COGEN and for which the draft permit includes federally enforceable emission limits.

Response 28: The five new engines of EU:1-COGEN at the WRRF are exempt from the CAM requirements for CO and VOC pursuant to 40 CFR §64.2(b)(i). The exemption states that Part 64 requirements do not apply to emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act.

40 CFR Part 60, Subpart GG - Standards of Performance for Stationary Combustion Turbines (NSPS GG).

Comment 29: Condition 80 of the draft permit seems to imply that the two existing emergency turbines of EU:1-COMB at the Facility could be exempt from compliance with the NO_x emission standard specified at 40 CFR § 60.6632(a) because the 2 turbines “are to be used for emergency power” and are “operated for less than 500 hours per year.” Based on 40 CFR § 60.332(g), emergency gas turbines are exempt from compliance with the NO_x emissions standard if they meet the emergency gas turbines definition at 40 CFR § 60.331(e). To ensure that the draft permit is federally enforceable and to improve the clarity of the permit, we recommend that the following or

similar language be added to the draft permit: “To be exempt from compliance with the NOx emission standards at 40 CFR §60.6632(a), the Facility must operate each of the two emergency turbines (identified as emission sources TURG 1 and TURG 2 of EU:1-COMB) according to the requirements in the definition of “emergency gas turbine” at 40 CFR § 60.331(e).”

Response 29: *NYSDEC has renumbered permit condition 80 as condition 98 and has revised permit condition 98 to include recommended language.*

40 CFR Part 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (NESHAP 5D).

Comment 30. The applicability of NESHAP 5D must be considered for the 4 boilers of EU:1- COMB. To ensure compliance with 6 NYCRR 201-6.4(a), which requires a title V permit to include conditions to address “[a]ll federal emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance,” the NESHAP 5D emission standards, operational requirements, and limitations that apply to the 4 boilers should be included in the draft permit. Furthermore, to ensure compliance with 6 NYCRR 201-6.4(b) (“Permit conditions for monitoring”) and (c) (“Permit conditions for recordkeeping and reporting of compliance monitoring”), the permit should include all NESHAP 5D monitoring and recordkeeping requirements that apply to the 4 boilers.

Comment 31. Condition 37 of the draft permit cites to NESHAP 5D but does not specify the emission sources at the Facility to which NESHAP 5D applies. This condition simply states, “[f]acilities that are major sources of HAP with industrial, commercial, or institutional boilers and/or process heaters must comply with applicable portion of 40 CFR 63 DDDDD.” Please update this permit condition by specifying the emissions sources to which NESHAP 5D applies.

Response 30 & 31: *Because the WRRF’s blower engines ceased operation in January 2018 and NYSDEC has removed all references to these air contamination sources from the permit., the WRRF is not a major source of HAPs. As a result, 40 CFR 63 DDDDD is not applicable and NYSDEC has removed it from the permit.*

40 CFR Part 63, Subpart VVV - National Emission Standards for Hazardous Air Pollutants: Publicly Owned Treatment Works (NESHAP 3V)

Comment 32: In Section III (Facility Information/Facility Applicable Federal Requirements) on page 4 of 77, the application states that 40 CFR 63.1586 in NESHAP 3V applies to North River. There are no applicable requirements from NESHAP 3V in the draft permit, and there is no discussion related to the applicability of NESHAP 3V in the PRR. Please address this issue.

Response 32: *The WRRF is an existing Group 2 POTW regulated under Subpart VVV but does not need to submit the initial notification since the North River WRRF is one of the 13 existing sources that previously were identified as having already met this notification requirement. Furthermore, since all of the WRRF's blower engines ceased operation in January 2018 and NYSDEC has removed all references to these air contamination sources from the permit, the WRRF is not a major source of HAPs and the 40 CFR 63 Subpart VVV requirements for major sources do not apply.*

6 NYCRR Part 212 Process Operations

Comment 33. As specified at 6 NYCRR 212-1.1(a)(2), Part 212 applies to process emission sources and/or emission points associated with a process operation, upon issuance of a renewal. However, review of the draft permit, PRR, and application documents provided to us, there is no indication whether North River has demonstrated compliance with Part 212 requirements upon this renewal of its title V permit. Please update the permitting record and the PRR to address this issue.

Response 33: *NYSDEC has updated the PRR to include that NYCDEP performed a plant-wide Air Guide 1 Analysis including both the plant's combustion and process sources and submitted that report to DEC on June 25, 2014. This permit renewal continues to implement the modifications made to the Title V permit as part of that permit modification.*

Comment 34. Condition 85 of the draft permit, which cites to 6 NYCRR 212-1.1(a)(1), is marked as an applicable federal requirement and indicates that it applies to all existing and new emissions units at the Facility, which are: EU:1-COGEN, EU:1-COMB, and EU:1-WWTRE. However, 6 NYCRR 212-1.1(a)(1) refers to the applicability of Part 212 to process emission sources and/or emission points associated with a process operation, upon issuance of a new or modified permit. Since this permitting action is a renewal and not a new or modified permit, please explain the rationale for using 6 NYCRR 212-1.1(a)(1) as the origin of authority for Condition 85.

Response 34: *NYSDEC has removed condition 85.*

Comment 35. Condition 27 of the draft permit cites to 6 NYCRR 212-1.5(e)(2) and is marked as an applicable federal requirement. However, this condition does not specify the emission sources to which it applies. Condition 27 reads as follows:

"Within sixty days of completion of the stack test based on the approved protocol, NYCDEP shall submit a Stack Test Report to the NYSDEC Region 2 office. A Toxic Impact Assessment (TIA) shall be done for emissions of High Toxicity Air Contaminants (HTACs) found in 6 NYCRR 212-2.2 and criteria pollutants within 60 days after submission of Stack Test Report. A Stack test and a TIA analysis are required once during the term of permit.

Monitoring Frequency: Once every five years Reporting Requirements: ANNUALLY (CALENDAR) Reports due 30 days after the reporting period. Subsequent reports are due every 12-calendar month(s)."

6 NYCRR 212-1.5(e)(2) contain provisions for determining the applicable emission standards for process emission sources that are subject to a NESHAP under 40 CFR Part 61 or Part 63.

Please revise Condition 27 to: (1) specify the process emission sources to which it applies; and (2) include language from 6 NYCRR 212-1.5(e)(2) to indicate that Condition 27 applies to process emission sources at the Facility that are subject to a NESHAP and to make it clear what the Facility is required to do to satisfy NYCRR Part 212 requirements for its process emission sources that are subject to a NESHAP.

Response 35: NYSDEC has renumbered condition 27 as condition 39 and has revised condition 39 to include the emission sources and to clarify the Facility's requirements under 6 NYCRR Part 212 for its NESHAP-regulated process operation sources.

Permit Review Report

Comment 36: Please update the PRR to address the applicability and/or non-applicability of the following federal regulations: NSPS2G, NSPS 4I, NSPS 4J, NESHAP 3V, NESHAP 4Z, NSHAP 5D, and the CAM rule as consistent with the NYSDEC PRR guidance, which requires that each PRR should include "a simplified description of why each regulation is applicable to the Facility", and should "address how the requirements applies and how the applicability was determined", and "why certain requirements were left out of the permit (e.g. Non applicable regulations)..".

Response 36: NYSDEC has revised the PRR to include applicability/non-applicability of NSPS2G, NSPS 4I, NSPS 4J, NESHAP 3V, NESHAP 4Z, NSHAP 5D, and the CAM rule.

November 30, 2018 EPA Region 2 Air Programs Branch, SIP Section Comment Letter

Comment 37: The three mid-size boilers require an emission limit at all times. NOx emission limit is indicated when gaseous fuels are combusted but there is no permit limit during emergency periods when these boilers combust diesel fuel. These boilers are not exempt from the Part 227-2 requirements and therefore, NYS needs to provide an emission limit for this emergency case.

The 2017 stack test report indicates that the draft permitted limit of 0.05 lb/mmBTU for the mid-size boilers cannot be achieved when burning natural gas. Stack test indicates

a measured emission limit of 0.066 lb/mmBTU. An alternative case-by-case RACT analysis should be performed for this later case.

For the mid-size boilers, NY does not provide an emission limit during emergency periods when gaseous fuels are not available, and when the boilers are combusting diesel fuel. EPA believes that NY should require a NOx emission limit during these emergency periods.

Response 37: *NYSDEC has revised the permit to reflect that the three mid-size boilers are distillate/gas and are, therefore, subject to the 0.08 limit as per 227-2.4(c)(1)(ii). See condition 95. A case-by-case RACT analysis is not required. New York State does not recognize boilers as emergency equipment and, therefore, the Applicant must comply with the above emission limitation at all times.*

Comment 38: For the two 42.7 mmBTU/hr combustion emergency turbines have a permit limit of 179 ppmvd (@15% O₂) but the 2017 stack test result for Turbine Generator #1 (with 179 ppmvd NO_x limit) has a result of 14.4 but it is not clear from this report what the units are (ppmvd, etc) and what fuel was combusted during the test. Please provide a clarification.

Response 38: *Table 1-7 of the 2017 stack test report states that, when combusting No. 2 fuel, turbine generator #1's NO_x emission is 14.37 lb/hr based on EPA RM 19 volumetric flow rate determination. (See Attachment A-1).*

Comment 39: For the two combustion emergency turbines, the 2011 NO_x RACT report indicates that SCR is technically feasible but not economically feasible partly due to the assumed annual operating time of 500 hours. NYSDEC should provide further clarification as to the actual operating hours for these turbines. The draft permit mentions the 500 hours operation, but it is not an enforceable limit. Please clarify.

Response 39: *New York State does not consider turbines to be emergency equipment. Therefore, these units must comply with the permitted limitations at all times. The Facility has voluntarily limited the combustion turbine hours to equal to or less than 500 hours annually. The permit further specifies these requirements in condition 86.*

Comment 40: For the Five (5) 940 BHP Internal Combustion Blower Engines, the draft permit and recent email communications with DEC R2 office, indicates that these engines are no longer in operation as of June 2018. Therefore, the NO_x emission limits and other requirements should be removed from the draft permit. Since these five blower engines are no longer in service as of June 2018, the EPA has no comment on NY's 2011 RACT analysis for these blower engines.

For the Five (5) 1,700 BHP Internal Combustion Pump Engines, the 2018

stack test report indicates an emission limit 10.5 g/bhp-hr which exceeds the permit limit of 8.26 g/bhp-hr. Therefore, an alternative case-by-case RACT analysis should be performed for this case.

Response 40: *Because all five blower engines are non-operational and are being decommissioned, NYSDEC has removed all reference to them from the permit. All 5 pump engines will cease operation by February 2022 and the first Cogen engine is scheduled to be online by December 2019. Therefore, based on review of information provided by NYCDEP, NYSDEC has determined that the alternative RACT for these sources is for NYCDEP to decommission the pump engines by December 31, 2022.*

Comment 41: For the five (5) 1,700 BHP Internal Combustion Pump Engines, NYC indicates that one technology (emulsified diesel) by Clean Fuel Technology shows some promise and that NYC would follow up with tests at a WWTP. Are there any updates on the feasibility of using this technology on these turbines? From the 2004 RACT analysis, seven other technologies were evaluated for RACT and determined to be technically infeasible – has NYC evaluated any other technologies since the 2004 report?

Response 41: *This technology no longer exists. Therefore, based on review of information provided by NYCDEP, NYSDEC has determined that the alternative RACT for these sources is decommissioning by December 31, 2022.*

Comment 42: For the five (5) 1,700 BHP Internal Combustion Pump Engines, NYC's 2011 RACT report mentions that the city continues to search for new technologies to control NOx emissions from IC engines. Possibilities discussed are (1) an engine improvement project in 2011 (at Owls Head WWTP) that was discussed in the June 2004 compliance plan; (2) feasibility studies for the North River WWTP to improve reliability and performance, including the IC engines at this plant. Did any of these two studies indicate RACT technical/economic feasibility for the IC engines at the North River WWTP?

Response 42: *Actions occurring at Owls Head are beyond the scope of this permit action. Based on review of information provided by NYCDEP, NYSDEC has determined that the alternative RACT for these sources is for NYCDEP to decommission the pump engines by December 31, 2022.*

Comment 43: For the 200-kW black-start engine generator and the 2000 kW emergency generator engine, NYC states that these engines are solely used for emergency power and therefore exempt as per subpart 227-2.4(f)(6). EPA concurs with this conclusion.

For the One (1) (existing) waste gas burner (a flare) that combusts excess DG, NYC states that this equipment is not subject to Part 227-2, but subject to Part 212 and there is no NOx emission limit in the draft permit. NY should clarify why this gas burner

is not subject to Part 227-2; alternatively, Part 212 provides for a RACT determination for general process sources. EPA believes this gas burner should be subject to Part 227-2 but in either case (applicable to either subpart 227-2.4(g) or subpart 212.10) a NOx emission limit should be established.

One (1) new gas burner (flare), there is no RACT review for this new flare and therefore, NYSDEC should provide a case-by-case RACT analysis under either Part 227-2 or Part 212, whichever is applicable, and establish a NOx RACT emission limit.

Response 43: *See Response to Comments 11 and 13.*

Comment 44: For the five (5) new cogen engines to be installed in the future, a recent email from NYSDEC Region 2 Office indicates that none of these new cogen engines are yet installed but points out that the draft permit indicates they will all be installed by August 2021. The draft permit establishes a NOx RACT limit of 2.0 g/bhp-hr which meets the presumptive RACT limit at subpart 227-2.4(f)(2) for an IC engine that combusts either landfill gas or DG (solely or in combination with NG). In the title V application, there is a NOx emission factor of 0.60 g/bhp-hr from the engine manufacturer. NY should consider lowering the NOx RACT limit after stack tests verify that a lower NOx limit is feasible.

Response 44: *The Department will not be requiring that the permittee comply with an emission limit that is more stringent than that contained in the netting analysis and subpart 227-2.4(f)(2), which is incorporated into the New York SIP. Therefore, the Department is not changing the Part 227-2.4(f)(2) 2.0 g/bhp-hr NOx RACT cited in the permit.*

Comments Received (English & Spanish) during the Public Comment Period

In addition, to comments received from the EPA, the Department received sixty-four (64) comment letters from the public. The comments were summarized into two categories of comments.

Comment 45: Commenters 3 through 66 requested that NYSDEC hold a public hearing to comment on the draft permit.

Response 45: *Regarding the request for the Department to hold a legislative hearing, upon review of the public comments, the Department has determined that holding a legislative hearing is not necessary. While a legislative hearing provides the public an opportunity to make unsworn statements on the record regarding the content of a permit, commenters do not have to attend a public hearing to place their comments on the record. Comments received in written or electronic form are given the same weight as oral comments when NYSDEC is reviewing comments on a permit action. The Department believes that the written statements it has received for this action effectively communicate the*

community's concerns. Since written statements and oral remarks have equal weight in NYSDEC's decision-making process, a legislative hearing is unnecessary. The record currently contains sufficient information for the Department to make an informed permit decision.

Comment 46: Because this permit allows NYCDEP to decommission the H_2S monitors located outside of the Facility, commenters 3 through 66 requested creation of a system that alerts the community of any emissions from the Facility that can affect the health and well-being of the community.

Response 46: *While this permit renewal/modification allows NYCDEP to decommission three H_2S monitors stations located outside of the Facility that monitored exclusively for H_2S nuisance odors, it does not eliminate the H_2S monitoring system requirements for inside the Facility. The permit continues to include H_2S monitoring requirements used by NYCDEP to identify malfunctions at the plant that need to be immediately addressed to avoid odor episodes in the community. NYSDEC has been advised, however, that NYCDEP will voluntarily and unilaterally continue to operate the three (3) community monitors.*

Comment 47: The North River H_2S Air Monitoring system is the essential “smoke detector” for our community. Removing the air monitoring system leaves the neighborhood unprotected and without it, the neighborhood is in the dark about factors that affect health and quality of life. Air quality should be a growing concern for communities surround North River and should therefore be subject to more extensive monitoring rather than less. Commenter 4, Commenter 66.

Response 47: *See response to Comment 46.*

Comment 48: Because air emissions were being monitored at the Facility, the community surrounding the Facility now trusts that the ambient air was safe for human health. Decreasing air monitoring at the Facility brings back the fear that there will be little to no oversight, and that there will not be an alert in time to forestall potential health-related concerns and raises fears related to health concerns such as respiratory illness, increase in asthma, skin conditions, and cancer. Decreasing air monitoring should not be a solution to any problem that the Facility is facing. Commenter 64.

Response 48: *See response to Comment 46.*

Comment 49: Elimination of data collection and plant monitoring in the area surrounding North River will result in the possibility of missing malfunctions in plant operations and create a tendency to overlook and possibly disregard incipient plant irregularities, thus allowing them to develop into full-blown environmental problems. Commenter 3.

Response 49: *The Department agrees with Commenter 3 that rigorous data collection and plant monitoring are important for identifying any violations of*

environmental standards, laws, rules, and regulations. NYSDEC is not eliminating data collection or plant monitoring for all Facility-emitted, regulated air contaminants with this renewal/modification.

Comment 50: Commenter 66 requested to be kept informed on the upcoming changes and rationale behind all decision made concerning the monitoring of air quality in the area.

Response 50: *The Department will continue to notify all interested parties of all major permit actions for this Facility.*

Comment 51: Commenter 64 raised historic environmental justice issues related to the original decision to site the Facility in a minority, low-income community, the Facility's history of odor issues, and how those odor issues created fear in the community as related to potential health impacts.

Response 51: *NYSDEC appreciates the community's historic concerns with this Facility as related to odor control issues. NYSDEC has continued to impose increasingly stringent limitations for emissions of all Facility-emitted, regulated air contaminants. While the Department is allowing NYCDEP to decommission certain physical monitoring stations, this permit action will not affect any of this Facility's limitations, monitoring, or reporting requirements.*