CITY OF VINELAND

RESOLUTION NO. 2021-²³¹

RESOLUTION AUTHORIZING THE EXECUTION OF A SETTLEMENT AGREEMENT BY AND BETWEEN THE CITY OF VINELAND AND NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION REGARDING THE HOWARD DOWN GENERATING STATION

WHEREAS, the Vineland Municipal Electric Utility (VMEU) has an air operating permit from the New Jersey Department of Environmental Protection (NJDEP) covering the allowed operation of, and air emissions from, equipment located at the Howard M. Down Generating Station, which includes Down Station Unit 11 (Unit 11); and

WHEREAS, the emissions from the Unit 11 turbine are monitored by continuous emission monitors (CEMS) and periodic stack tests, and other operating parameters of Unit 11 are also monitored according to the provisions of the permit; and

WHEREAS, any emission exceedances recorded by the CEMS or during stack tests, and any deviations from required operating parameters, must be reported to the NJDEP in quarterly and annual reports; and

WHEREAS, exceedances of the stringent emission standards which apply to Unit 11 have sometimes occurred, usually caused by brief equipment problems, and have been reported to the NJDEP, as required; and

WHEREAS, the NJDEP has recently concluded an evaluation of such filed reports, including a stack test report for a test conducted in June, 2017, quarterly reports filed for 2017, 2018, and 2019, and annual reports filed for the years 2013 to 2019, as well as individual incident reports submitted by the utility explaining the circumstances surrounding reported exceedances; and

WHEREAS, affirmative defenses have been granted, based on submitted incident reports, for certain of the reported exceedances, with associated penalties waived for those exceedances; and

WHEREAS, the NJDEP has, however, assessed penalties for other exceedances, based on a standard schedule of fines contained in the air pollution regulations for incidents identified by continuous monitoring, stack tests and permit reports, and has issued a proposed settlement which covers these alleged violations and penalty assessments; and

WHEREAS, the NJDEP has offered a settlement with an overall 25% penalty reduction from the initially calculated \$127,800 to **\$95,850**; and

WHEREAS, the City Council of the City of Vineland deems it in the best interest of the City to settle this matter rather than proceed on to costly litigation and expenses;

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of Vineland that the Mayor of the City of Vineland is hereby authorized to execute on behalf of the City of Vineland a Settlement Agreement in the form attached hereto.

Adopted:

President of Council

ATTEST:

City Clerk



Memorandum

To:	Mayor Anthony Fanucci	
	Bob Dickenson, Asst. Business Administrator	
CC:	John Lillie, Director, Utilities	
	Joseph Isabella, General Manager, Utilities	
	Richard P. Tonetta, Esq, City Solicitor	

From: Lisa Fleming, Sup. Environmental Health Specialist – Electric Utility Lisa A. Fleming

Date: May 10, 2021

Re: DEP Settlement Agreement – NEA200001-75507 - with Penalty Reduction alleged air permit violations – Unit 11 turbine, March 2013 to December 2019

The electric utility has an air operating permit from the NJDEP covering the operation of all sources of air pollution at VMEU's Down Station, the most significant of which is the Unit 11 combustion turbine which was installed in 2012. Because it is a relatively new source, the Unit 11 turbine has very low air permit limits, based on its state-of-the-art emission controls. Those controls perform very well, and emissions are usually extremely low and below these limits, but any problems occurring with the turbine or control equipment, even minor problems, can cause an exceedance of these low technologically-based limits, and equipment problems do sometimes occur.

Certain emissions from the Unit 11 turbine are monitored by continuous emission monitors (CEMS). Summary reports on the emissions recorded by these monitors are submitted quarterly to the NJDEP. Some emission exceedances, usually caused by very brief equipment problems, have been reported over time. The Unit 11 turbine also periodically undergoes stack testing in which a third party company measures a number of different types of emissions, including some not measured by the CEMS, using test methods approved by EPA. One such test occurred in 2017 for which irregularities were reported. The test was rerun as soon as the problems were known, with complete compliance demonstrated, however DEP considers the original results valid and has determined that the emissions reported must be evaluated from a compliance standpoint.

Each year, the Utility must also certify the compliance status of all sources at the station and enumerate any permit deviations, apart from the emissions monitored by the CEMS or reported for a stack test, that occurred over the prior year. These deviations are sometimes related to the emission exceedances that are included on quarterly reports, but include other permit provisions that are more directly stated, such as the requirement to inject water and ammonia into the control equipment during all operation, which may not show up in the CEMS reports. These deviations can be separately addressed through DEP enforcement actions.

DEP has recently concluded an evaluation of past summary reports for Down Station - quarterly emission reports from 2017 to 2019, and annual reports from 2013 to 2019 - which have not been previously addressed by DEP Enforcement. Affirmative defenses have been granted for a number of the reported exceedances, based on individual incident reports submitted by the utility to explain the circumstances surrounding the exceedances, and associated penalties have been waived in these cases. DEP has, however, assessed penalties for certain of the other exceedances. VMEU has received a proposed settlement from the DEP regional enforcement section regarding these alleged violations and penalty assessments. (See attached.)

The air pollution regulations contain a standard schedule of fines for incidents identified by continuous monitoring, as well as those shown through stack testing and other types of site monitoring, and these are the basis of the DEP penalty assessments. (Calculations have been provided by DEP with the proposed settlement document.) In further consideration of all circumstances, however, and the fact that all incidents have been resolved, DEP has offered a settlement with an overall 25% penalty reduction. In the agreement, the penalty has been reduced from the initially calculated \$127,800 to \$95,850. Because further litigation would likely cost more than any reduction that might be realized through an appeal process (and an appeal might instead result in assessment of a greater penalty), it is recommended that the proposed settlement agreement be approved and signed by the mayor, and the proposed penalty paid. (As noted above, this total represents penalties accrued over seven years from 2013 to 2019.)

We are requesting that a resolution authorizing execution of this Settlement Agreement be added to the City Council agenda for May 25, 2021.

If you have any questions about the settlement or facts of the matter, please feel free to contact me at <u>lfleming@vinelandcity.org</u> or call me a City Extension x4163. Thanks.



State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF AIR ENFORCEMENT BUREAU OF AIR COMPLIANCE & ENFORCEMENT- SOUTHERN 2 Riverside Drive, Suite 201 Camden, New Jersey 08103 Tel. (856) 614-3601 * Fax. (856) 614-6313

SHAWN M. LATOURETTE Acting Commissioner

PHILIP D. MURPHY Governor

SHEILA Y. OLIVER Lt. Governor

> IN THE MATTER OF VINELAND CITY MUNICIPAL ELECTRIC UTILITY HOWARD DOWN GENERATING STATION 211 N WEST AVE / PO BOX 1508 VINELAND, NJ 08362-1508

SETTLEMENT AGREEMENT

EA ID # NEA210001 - 75507

- 1. This Settlement Agreement is entered into pursuant to the authority vested in the Commissioner of the New Jersey Department of Environmental Protection ("Department") by N.J.S.A. 13:1D-1 et seq., and the Air Pollution Control Act, N.J.S.A. 26:2C-1 et seq. (the "Act"), and duly delegated to the Manager, Division of Air Enforcement, Bureau of Air Compliance & Enforcement Southern pursuant to N.J.S.A.13:1B-4.
- 2. The Department has completed its compliance evaluations of the following reports submitted by VINELAND MUNICIPAL ELECTRIC UTILITY HOWARD M. DOWN:

Annua	l Com	pliance	Certifications

SUB140003 = 2013 SUB150003 = 2014 SUB160003 = 2015 SUB170003 = 2016 SUB180003 = 2017 SUB190003 = 2018 SUB200003 = 2019

Quarterly EEMPRs

SUB170004 = 1Qtr/17 SUB170007 = 2Qtr/17 SUB170008 = 3Qtr/17 SUB180001 = 4Qtr/17 SUB180004 = 1Qtr/18 SUB180006 = 2Qtr/18 SUB180008 = 3Qtr/18 SUB190007 = 2Qtr/19 SUB190009 = 3Qtr/19 SUB200002 = 4Qtr/19

<u>Stack Test</u>

TST160002 (June 20, 21, and 22, 2017)

New Jersey is an Equal Opportunity Employer. Printed on Recycled Paper and Recyclable.

STACK TEST (TST160002)

 $\frac{\text{TST-A} \text{ Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a),}{\text{NOx (Total)} <= 5.4 \text{ lb/hr.}}$

<u>Description of Noncompliance</u>: The Department has determined that as a result of stack emission testing conducted on June 21 (Runs #1 and #2) and June 22 (Run #3), 2017, you operated Unit #11 firing natural gas, while emissions to the outdoor atmosphere exceeded the allowable limit stated in Operating Permit BOP160003 – U11 – OS1 – Reference #10 as follows:

<u>Contaminant</u>	Run 1	Run 2	Run 3	Average	Allowable
NOx lb/hr	5.46	5.26	5.78	5.50	5.4

 $\frac{\text{TST-B} \text{ Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a),}{\text{PM-10 (Total)} \le 5 \text{ lb/hr.}}$

<u>Description of Noncompliance</u>: The Department has determined that as a result of stack emission testing conducted on June 20, 21, and 22, 2017, you operated Unit #11 firing natural gas, while emissions to the outdoor atmosphere exceeded the allowable limit stated in Operating Permit BOP160003 – U11 – OS1 – Reference #23 as follows:

<u>Contaminant</u>	Run 1	Run 2	Run 3	Average	Allowable
PM-10 lb/hr	12.7	18.4	6.69	12.6	5.0

 $\frac{\text{TST-C} \text{ Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a),}{\text{PM-2.5 (Total)} <= 5 \text{ lb/hr.}}$

<u>Description of Noncompliance</u>: The Department has determined that as a result of stack emission testing conducted on June 20, 21, and 22, 2017, you operated Unit #11 firing natural gas, while emissions to the outdoor atmosphere exceeded the allowable limit stated in Operating Permit BOP160003 – U11 – OS1 – Reference #22 as follows:

<u>Contaminant</u>	Run 1	Run 2	Run 3	Average	Allowable
PM-2.5 lb/hr	11.6	16.9	5.53	11.3	5

VINELAND MUNICIPAL ELECTRIC UTILITY HOWARD M. DOWN NEA210001 - 75507 Page 3 of 22

TST-D Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), monitored by stack emission testing at the approved frequency. Unless otherwise approved in the stack test protocol or by the Department, each test run shall be 60 minutes in sampling duration. Compliance period shall be as specified in the monitoring requirement for each applicable emission limit. Stack tests shall be conducted for NOx, CO, PM-2.5, PM-10 and Ammonia emissions (when combusting natural gas) and for NOx, CO, VOC, TSP, PM-2.5, PM-10, and Ammonia emissions (when combusting ULSD). In accordance with N.J.A.C. 7:27-19.15(a)2, any NOx testing conducted pursuant to this section shall be conducted concurrently with CO testing. The applicable NOx emission limits in N.J.A.C. 7:27-19 will not be considered to have been met unless the concurrent CO testing demonstrates compliance with the CO limit in N.J.A.C. 7:27-16.9 or the permit limit for CO, whichever is more stringent, is also met.

Description of Noncompliance: You failed to ensure that all requirements of Operating Permit BOP160003 were met by failing to conduct a valid stack test for Ammonia on Unit #11, as set forth at U11 - OS0 - Reference #2. Specifically, tests conducted on June 21 and June 22, 2017 for ammonia were invalid due to the test samples not being analyzed within the maximum hold-time of 14 days, as set forth by the test method, CTM-027. Samples were analyzed 17 days (Runs 1 and 2) and 16 days (Run 3) after collection.

2013 ANNUAL COMPLIANCE CERTIFICATION (SUB140003)

<u>13A</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), start-up period: startup commences with initiation of the combustion of fuel in the combustion turbine and concludes when the turbine reaches steady state operation. The duration of start-up shall not exceed 10 minutes.
 <u>Description of Noncompliance:</u> Duration of your start-up period exceeded the allotted 10 minute period on the Howard Down Combustion Turbine, specifically on the date listed below, as reported in your 2013 Annual Compliance Certification, SUB140003, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit U11 – OS Summary – Ref# 12.
 DATES 11/07/13

VINELAND MUNICIPAL ELECTRIC UTILITY HOWARD M. DOWN NEA210001 - 75507 Page 4 of 22

<u>13B</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), ammonia <= 5 ppmvd @ 15% O2.
 <u>Description of Noncompliance:</u> Ammonia Slip occurred on the date(s) listed below, when the concentration of emissions of Ammonia (ppmvd) from the Howard Down Combustion Turbine exceeded the maximum allowable 5 ppmvd Ammonia, as reported in your 2013 Annual Compliance Certification # SUB140003, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 – OS1 – Ref# 24.
 DATES 03/06/13 03/18/13

2014 ANNUAL COMPLIANCE CERTIFICATION (SUB150003)

<u>14A</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), the permittee shall operate the Water Injection System during all periods that the gas turbine combusts natural gas or ultra low sulfur distillate fuel oil (ULSD), except during start-up and shutdown.

<u>Description of Noncompliance</u>: Water Injection System did not operate during all periods at the Howard Down Combustion Turbine as required, specifically on the date(s) listed below, as reported in your 2014 Annual Compliance Certification # SUB150003, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 – OS Summary – Ref# 41. DATES

02/11/14

14B Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), the SCR (CD19) shall be operated at all times that the turbine is operating, except during start-up and shutdown.

Description of Noncompliance: SCR did not operate at all times on the Howard Down Gas Turbine as required, specifically on the date(s) listed below, as reported in your 2014 Annual Compliance Certification # SUB150003, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 – OS Summary – Ref# 43.

DATES

11/08/14

VINELAND MUNICIPAL ELECTRIC UTILITY HOWARD M. DOWN NEA210001 - 75507 Page 5 of 22

<u>14C</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), ammonia <= 5 ppmvd @ 15% O2.

<u>Description of Noncompliance</u>: Ammonia Slip occurred on the dates listed below, when the concentration of emissions of Ammonia (ppmvd) from the Howard Down Combustion Gas Turbine exceeded the maximum allowable 5 ppmvd Ammonia, as reported in your 2014 Annual Compliance Certification # SUB150003, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 – OS1 – Ref# 24. DATES

01/07/14 07/10/14 08/25/14

14D Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), start-up Period: Startup commences with initiation of the combustion of fuel in the combustion turbine and concludes when the turbine reaches steady state operation. The duration of start-up shall not exceed 10 minutes.

<u>Description of Noncompliance</u>: Duration of your start-up period exceeded the allotted 10 minute period on the Howard Down Combustion Turbine, specifically on the date(s) listed below, as reported in your 2014 Annual Compliance Certification # SUB150003, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit U11 – OS Summary – Ref# 12.

DATES

01/03/14

2015 ANNUAL COMPLIANCE CERTIFICATION (SUB160003)

<u>15A</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), water-to-Fuel Ratio: The water-to-fuel ratio shall be within the manufacturer's recommended limits.

<u>Description of Noncompliance</u>: Water-to-Fuel Ratio fell outside the manufacturer's recommended limits on the Howard Down Combustion Turbine, specifically on the date(s) listed below, as reported in your 2015 Annual Compliance Certification # SUB160003, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit U11 – OS Summary – Ref# 40.

DATES

02/16/15

VINELAND MUNICIPAL ELECTRIC UTILITY HOWARD M. DOWN NEA210001 - 75507 Page 6 of 22

<u>15B</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and 40 CFR 60.4320(a), Nox (Total) <= 25 ppmvd @ 15% O2. This limit applies to a turbine that has heat input at peak load greater than 50 MMBtu/hr (HHV) but less or equal to 850 MMBtu/hr (HHV) firing natural gas and which commenced construction after February 18, 2005. Pursuant to 40 CFR 60.4320(a), this turbine is subject to either the input or the output NSPS limit (25 ppmdv @ 15% O2 or 1.2 lb/MWhr).</p>

<u>Description of Noncompliance:</u> NSPS KKKK NOx limit was exceeded on the date(s) listed below, when the NOx (Total) emissions from the Howard Down Combustion Turbine exceeded the maximum allowable 25 ppmvd, as reported in your 2015 Annual Compliance Certification # SUB160003, therefore you failed to comply with all requirements of NSPS subpart KKKK for Stationary Combustion Turbines, and you failed to fulfill all conditions and provisions of your Title V Operating Permit U11 – OS1 – Ref# 45.

DATES

02/16/15

<u>15C</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), ammonia <= 5 ppmvd @ 15% O2.

<u>Description of Noncompliance</u>: Ammonia Slip occurred on the date(s) listed below, when the concentration of emissions of Ammonia (ppmvd) from the Howard Down Combustion Turbine exceeded the maximum allowable 5 ppmvd Ammonia, as reported in your 2015 Annual Compliance Certification # SUB160003, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 – OS1 – Ref# 24.

DATES 02/16/15 06/30/15 07/29/15 08/01/15

 <u>15D</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), Maximum Gross Heat Input <= 590 MMBTU/hr (HHV) while firing natural gas. <u>Description of Noncompliance:</u> Exceedances occurred on the date(s) listed below, when the Maximum Gross Heat Input of the Howard Down Combustion Turbine exceeded the maximum allowable limit of <= 590 MMBTU/hr (HHV), as reported in your 2015 Annual Compliance Certification # SUB160003, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 – OS1 – Ref# 44. DATES

VINELAND MUNICIPAL ELECTRIC UTILITY HOWARD M. DOWN NEA210001 - 75507 Page 7 of 22

05/10/15 05/11/15

<u>15E</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), Ammonia Flow Rate to SCR >= 84 lb/hr. The facility shall maintain the minimum flow rate during all operation, except during periods of startup and shutdown. The permittee shall not be considered in violation for any deviations from this requirement if corresponding NOx emissions from the gas turbine are in compliance with applicable emission limits as established in this permit.

<u>Description of Noncompliance</u>: The 84 lb/hr minimum Ammonia Injection Flow Rate to SCR on the Howard Down Combustion Turbine was not met, specifically on the date(s) listed below, as reported in your 2015 Annual Compliance Certification # SUB160003, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit U11 – OS Summary – Ref# 44.

DATES

07/08/15

2016 ANNUAL COMPLIANCE CERTIFICATION (SUB170003)

<u>16A</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), start-up Period: Startup commences with initiation of the combustion of fuel in the combustion turbine and concludes when the turbine reaches steady state operation, or when combustion is ceased prior to attaining steady state operation (e.g. if start-up is abandoned due to malfunction). The duration of start-up shall not exceed 20 minutes.

<u>Description of Noncompliance</u>: Duration of your start-up period exceeded the allotted 20 minute period on the Howard Down Combustion Turbine, specifically on the date(s) listed below, as reported in your 2016 Annual Compliance Certification # SUB170003, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit U11 – OS Summary – Ref# 11.

DATES

10/19/16

<u>16B</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), ammonia Flow Rate to SCR >= 84 lb/hr. The facility shall maintain the minimum flow rate during all operation, except during periods of startup and shutdown. The permittee shall not be considered in violation for any deviations from this requirement if corresponding NOx emissions from the gas turbine are in compliance with applicable emission limits as established in this permit.

<u>Description of Noncompliance</u>: The 84 lb/hr minimum Ammonia Injection Flow Rate to SCR on the Howard Down Combustion Turbine was not met, specifically on the date(s) listed below, as reported in your 2016 Annual Compliance Certification # SUB170003, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit U11 – OS Summary – Ref# 44.

DATES 10/19/16

<u>16C</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), ammonia <= 5 ppmvd @ 15% O2.

<u>Description of Noncompliance</u>: Ammonia Slip occurred on the date(s) listed below, when the concentration of emissions of Ammonia (ppmvd) from the Howard Down Combustion Turbine exceeded the maximum allowable 5 ppmvd Ammonia, as reported in your 2016 Annual Compliance Certification # SUB170003, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 – OS1 – Ref# 24.

DATES 02/05/16 02/15/16 10/26/16

- <u>16D</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), maximum Gross Heat Input <= 590 MMBTU/hr (HHV) while firing natural gas.
 <u>Description of Noncompliance:</u> Exceedances occurred on the date(s) listed below, when the Maximum Gross Heat Input of the Howard Down Combustion Turbine exceeded the maximum allowable limit of <= 590 MMBTU/hr (HHV), as reported in your 2016 Annual Compliance Certification # SUB170003, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 OS1 Ref# 44.
 DATES 02/15/16 02/18/16
 - 02/20/16
 - 03/05/16

2017 ANNUAL COMPLIANCE CERTIFICATION (SUB180003)

 17A
 Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), ammonia <= 5 ppmvd @ 15% O2.</th>

 Description of Noncompliance: Ammonia Slip occurred on the dates listed below, where the concentration of emissions of Ammonia Slip occurred below.

below, when the concentration of emissions of Ammonia (ppmvd) from the Howard Down Combustion Turbine exceeded the maximum allowable 5 ppmvd, as reported in your 2017 Annual Compliance Certification # SUB180003, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 – OS1 – Ref# 24.

DATES 02/13/17 03/27/17 05/15/17 05/16/17 05/22/17 05/23/17 06/08/17 06/13/17 09/15/17 10/23/17 10/23/17 10/30/17 11/08/17 11/11/17

 <u>17B</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), Maximum Gross Heat Input <= 590 MMBTU/hr (HHV) while firing natural gas. <u>Description of Noncompliance:</u> Exceedance(s) occurred on the dates listed below, when the Maximum Gross Heat Input of the Howard Down Combustion Gas Turbine exceeded the maximum allowable limit of <= 590 MMBTU/hr (HHV), as reported in your 2017 Annual Compliance Certification # SUB180003, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 – OS1 – Ref# 44. DATES 10/12/17

10/16/17

2018 ANNUAL COMPLIANCE CERTIFICATION (SUB190003)

18A Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), start-up Period: Startup commences with initiation of the combustion of fuel in the combustion turbine and concludes when the turbine reaches steady state operation, or when combustion is ceased prior to attaining steady state operation (e.g. if start-up is abandoned due to malfunction). The duration of start-up shall not exceed 20 minutes.

<u>Description of Noncompliance</u>: Duration of your start-up period exceeded the allotted 20 minute period on the Howard Down Combustion Turbine, specifically on the date(s) listed below, as reported in your 2018 Annual Compliance Certification # SUB190003, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit U11 – OS Summary – Ref# 12.

DATES 05/17/18

<u>18B</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), the SCR (CD19) shall be operated at all times that the turbine is operating, except during start-up and shutdown.

<u>Description of Noncompliance</u>: The SCR did not operate at all times on the Howard Down Combustion Turbine as required, specifically on the date(s) listed below, as reported in your 2018 Annual Compliance Certification # SUB190003, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 - OS Summary - Ref# 46. DATES

10/28/18

<u>18C</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), ammonia <= 5 ppmvd @ 15% O2.

<u>Description of Noncompliance</u>: Ammonia Slip occurred on the date(s) listed below, when the concentration of emissions of Ammonia (ppmvd) from the Howard Down Combustion Turbine exceeded the maximum allowable 5 ppmvd Ammonia, as reported in your 2018 Annual Compliance Certification # SUB190003, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 – OS1 – Ref# 24.

DATES

10/06/18

2019 ANNUAL CERTIFICATION (SUB200003)

<u>19A</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), ammonia <= 5 ppmvd @ 15% O2.

<u>Description of Noncompliance</u>: Ammonia Slip occurred on the date(s) listed below, when the concentration of emissions of Ammonia (ppmvd) from the Howard Down Combustion Turbine exceeded the maximum allowable 5 ppmvd Ammonia, as reported in your 2019 Annual Compliance Certification # SUB200003, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 – OS1 – Ref# 24.

DATES 03/01/19 06/19/19

<u>19B</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), maximum Gross Heat Input <= 590 MMBTU/hr (HHV) while firing natural gas.
 <u>Description of Noncompliance:</u> Exceedances occurred on the date(s) listed below, when the Maximum Gross Heat Input of the Howard Down Combustion Turbine exceeded the maximum allowable limit of <= 590 MMBTU/hr (HHV), as reported in your 2019 Annual Compliance Certification # SUB200003, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 – OS1 – Ref# 44.

01/08/19 02/19/19 02/25/19 02/26/19 03/01/19 03/04/19 03/20/19 03/27/19 03/28/19

03/29/19

2017 EEMPR – 1ST QUARTER (SUB170004)

<u>E1</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), CO ≤ 5 ppmvd @ 15% O2.

Description of Noncompliance: During the 1st Quarter 2017, you exceeded the allowable CO emission limit of <= 5 ppmvd @ 15% O2 on Unit 11 Howard Down Turbine, as reported in your Excess Emissions Report #SUB170004, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 - OS1 - Reference #11.

DATES 01/09/17

02/27/17 03/03/17 03/04/17 03/05/17 03/06/17

E2

<u>Requirement:</u> Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), CO <= 0.012 lb/MMBTU.

<u>Description of Noncompliance</u>: During the 1st Quarter 2017, you exceeded the allowable CO emission limit of ≤ 0.012 lb/MMBTU on Unit 11 Howard Down Turbine, as reported in your Excess Emissions Report #SUB170004, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 – OS1 – Reference #14.

DATES 01/09/17

03/05/17

E3 Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), $CO \le 6.4$ lb/hr.

<u>Description of Noncompliance</u>: During the 1st Quarter 2017, you exceeded the allowable CO emission limit of <= 6.4 lb/hr on Unit 11 Howard Down Turbine, as reported in your Excess Emissions Report #SUB170004, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 - OS1 - Reference #15.

DATES 01/09/17

02/27/17

03/03/17

VINELAND MUNICIPAL ELECTRIC UTILITY HOWARD M. DOWN NEA210001 - 75507 Page 13 of 22

```
03/04/17
03/05/17
03/06/17
```

2017 EEMPR – 2ND QUARTER (SUB170007) 6.

E4

Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), CO <= 5 ppmvd @ 15% O2.

Description of Noncompliance: During the 2nd Quarter 2017, you exceeded the allowable CO emission limit of <= 5 ppmvd @ 15% O2 on Unit 11 Howard Down Turbine, as reported in your Excess Emissions Report #SUB170007, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 – OS1 – Reference#11.

DATES 05/03/17 05/08/17 05/09/17 06/08/17 06/09/17 06/15/17 06/29/17

E5 Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), CO <= 6.4 lb/hr.

Description of Noncompliance: During the 2nd Quarter 2017, you exceeded the allowable CO emission limit of <= 6.4 lb/hr on Unit 11 Howard Down Turbine, as reported in your Excess Emissions Report #SUB170007, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 -OS1 - Reference#15.

DATES 05/03/17 05/08/17 05/09/17 06/08/17 06/09/17 06/15/17 06/29/17

2017 EEMPR - 3RD QUARTER (SUB170008)

 <u>E6</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), NOx (Total) <= 2.5 ppmvd @ 15% O2.
 <u>Description of Noncompliance:</u> During the 3rd Quarter 2017, you exceeded the allowable NOx emission limit of <= 2.5 ppmvd @ 15% O2 on Unit 11 Howard Down Turbine, as reported in your Excess Emissions Report #SUB170008, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 – OS1 – Reference #5. DATES

07/03/17

08/18/17

E7 Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), NOx (Total) ≤ 5.4 lb/hr.

<u>Description of Noncompliance</u>: During the 3rd Quarter 2017, you exceeded the allowable NOx emission limit of ≤ 5.4 lb/hr on Unit 11 Howard Down Turbine, as reported in your Excess Emissions Report #SUB170008, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 – OS1 – Reference #9.

DATES 08/18/17

<u>E8</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), $CO \le 5 \text{ ppmvd} @ 15\% O2.$

<u>Description of Noncompliance</u>: During the 3rd Quarter 2017, you exceeded the allowable CO emission limit of <= 5 ppmvd @ 15% O2 on Unit 11 Howard Down Turbine, as reported in your Excess Emissions Report #SUB170008, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 - OS1 – Reference#11.

DATES 07/04/17 07/05/17 07/30/17 07/31/17 08/05/17 09/12/17

VINELAND MUNICIPAL ELECTRIC UTILITY HOWARD M. DOWN NEA210001 - 75507 Page 15 of 22

E9 Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), $CO \le 6.4 \text{ lb/hr}.$

<u>Description of Noncompliance</u>: During the 3rd Quarter 2017, you exceeded the allowable CO emission limit of ≤ 6.4 lb/hr on Unit 11 Howard Down Turbine, as reported in your Excess Emissions Report #SUB170008, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 - OS1 – Reference#15.

DATES 07/4/17 07/5/17 07/30/17 08/5/17 08/30/17 08/31/17 09/12/17

2017 EEMPR – 4TH QUARTER (SUB180001)

<u>E10</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), $CO \le 5 \text{ ppmvd} (a) 15\% O2.$

<u>Description of Noncompliance</u>: During the 4th Quarter 2017, you exceeded the allowable CO emission limit of ≤ 5 ppmvd @ 15% O2 on Unit 11 Howard Down Turbine, as reported in your Excess Emissions Report #SUB180001, in violation of your Operating Permit BOP170002, U11 – OS1 – Reference #11.

DATES 10/31/17 11/01/17 11/05/17 11/06/17 11/07/17 12/21/17 12/27/17 12/28/17

VINELAND MUNICIPAL ELECTRIC UTILITY HOWARD M. DOWN NEA210001 - 75507 Page 16 of 22

Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), E11 $CO \le 6.4 \text{ lb/hr}.$ Description of Noncompliance: During the 4th Quarter 2017, you exceeded the allowable CO emission limit of <= 6.4 lb/hr on Unit 11 Howard Down Turbine, as reported in your Excess Emissions Report #SUB180001, in violation of your Operating Permit BOP170002, U11 - OS1 - Reference #15. DATES 10/26/17 10/30/17 10/31/17 11/01/17 11/05/17 11/06/17 11/07/17 11/11/17 12/21/17 12/27/17 12/28/17

2018 EEMPR – 1ST QUARTER (SUB180004)

<u>E12</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), CO <= 5 ppmvd @ 15% O2.

<u>Description of Noncompliance</u>: During the 1st Quarter 2018, you exceeded the allowable CO emission limit of ≤ 5 ppmvd @ 15% O2 on Unit 11 Howard Down Turbine, as reported in your Excess Emissions Report #SUB180004, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 – OS1 – Reference #11.

DATES

01/07/18

E13 Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), $CO \le 0.012$ lb/MMBTU.

<u>Description of Noncompliance</u>: During the 1st Quarter 2018, you exceeded the allowable CO emission limit of ≤ 0.012 lb/MMBTU on Unit 11 Howard Down Turbine, as reported in your Excess Emissions Report #SUB180004, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 - OS1 - Reference #13.

DATES

01/07/18

E14 Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), $CO \le 6.4 \text{ lb/hr}$.

<u>Description of Noncompliance</u>: During the 1st Quarter 2018, you exceeded the allowable CO emission limit of ≤ 6.4 lb/hr on Unit 11 Howard Down Turbine, as reported in your Excess Emissions Report #SUB180004, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 – OS1 – Reference #15.

DATES

01/07/18

2018 EEMPR – 2ND QUARTER (SUB180006)

<u>E15</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), $CO \le 5 \text{ ppmvd} @ 15\% O2.$

<u>Description of Noncompliance</u>: During the 2^{nd} Quarter 2018, you exceeded the allowable CO emission limit of <= 5 ppmvd @ 15% O2 on Unit 11 Howard Down Turbine, as reported in your Excess Emissions Report #SUB180006, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 – OS1 – Reference #11.

DATES 05/07/18 05/08/18

<u>E16</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), $CO \le 6.4 \text{ lb/hr}.$

<u>Description of Noncompliance</u>: During the 2nd Quarter 2018, you exceeded the allowable CO emission limit of ≤ 6.4 lb/hr on Unit 11 Howard Down Turbine, as reported in your Excess Emissions Report #SUB180006, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 - OS1 - Reference #15.

DATES 05/7/18 05/8/18 05/9/18

2018 EEMPR – 3RD QUARTER (SUB180008)

- <u>E17</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), CO <= 5 ppmvd @ 15% O2.
 <u>Description of Noncompliance:</u> During the 3rd Quarter 2018, you exceeded the allowable CO emission limit of <= 5 ppmvd @ 15% O2 on Unit 11 Howard Down Turbine, as reported in your Excess Emissions Report #SUB180008, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 OS1 Reference #11.
 DATES 07/08/18
- E18 Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), $CO \le 6.4$ lb/hr.

<u>Description of Noncompliance</u>: During the 3rd Quarter 2018, you exceeded the allowable CO emission limit of ≤ 6.4 lb/hr on Unit 11 Howard Down Turbine, as reported in your Excess Emissions Report #SUB180008, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 - OS1 - Reference #15.

DATES

07/08/18

2019 EEMPR – 2ND QUARTER (SUB190007)

E19 Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), $CO \le 6.4$ lb/hr.

<u>Description of Noncompliance</u>: During the 2^{nd} Quarter 2019, you exceeded the allowable CO emission limit of <= 6.4 lb/hr on Unit 11 Howard Down Turbine, as reported in your Excess Emissions Report #SUB190007, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 – OS1 – Reference #15.

DATES

06/21/19

06/23/19

2019 EEMPR - 3RD QUARTER (SUB190009)

 <u>E20</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), NOx (Total) <= 2.5 ppmvd @ 15% O2.
 <u>Description of Noncompliance:</u> During the 3rd Quarter 2019, you exceeded the allowable NOx emission limit of <= 2.5 ppmvd @ 15% O2 on Unit 11 Howard Down, as reported in your Excess Emissions Report #SUB190009, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 – OS1 – Reference #5.
 DATES 07/05/19 07/30/19 09/09/19

<u>E21</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), NOx (Total) ≤ 5.4 lb/hr.

<u>Description of Noncompliance</u>: During the 3rd Quarter 2019, you exceeded the allowable NOx emission limit of ≤ 5.4 lb/hr on Unit 11 Howard Down Turbine, as reported in your Excess Emissions Report #SUB190009, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 – OS1 – Reference #9.

DATES 07/05/19 09/09/19

E22 Requirement: Pursuant to N.J.A.C. N.J.A.C. 7:27-22.3(e) and 7:27-22.16(a), CO <= 5 ppmvd @ 15% O2.

<u>Description of Noncompliance</u>: During the 3rd Quarter 2019, you exceeded the allowable CO emission limit of <= 5 ppmvd @ 15% O2 on Unit 11 Howard Down Turbine, as reported in your Excess Emissions Report #SUB190009, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 - OS1 - Reference #11. DATES

09/24/19

VINELAND MUNICIPAL ELECTRIC UTILITY HOWARD M. DOWN NEA210001 - 75507 Page 20 of 22

<u>E23</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), $CO \le 6.4 \text{ lb/hr}$.

<u>Description of Noncompliance</u>: During the 3rd Quarter 2019, you exceeded the allowable CO emission limit of ≤ 6.4 lb/hr on Unit 11 Howard Down Turbine, as reported in your Excess Emissions Report #SUB190009, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 – OS1 – Reference #15.

DATES 07/24/19 09/24/19

09/29/19

2019 EEMPR – 4TH QUARTER (SUB200002)

<u>E24</u> Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a), $CO \le 6.4 \text{ lb/hr}$.

<u>Description of Noncompliance</u>: During the 4th Quarter 2019, you exceeded the allowable CO emission limit of ≤ 6.4 lb/hr on Unit 11 Howard Down Turbine, as reported in your Excess Emissions Report #SUB200002, therefore you failed to fulfill all conditions and provisions of your Title V Operating Permit, U11 – OS1 – Ref#15.

DATES 10/8/19

E25Requirement: Pursuant to N.J.A.C. 7:27-22.3(e) and N.J.A.C. 7:27-22.16(a),
NOx (Total) <= 2.5 ppmvd @ 15% O2.</th>Description of Noncompliance: During the 4th Quarter 2019, you exceeded the
allowable NOx emission limit of <= 2.5 ppmvd @ 15% O2 on Unit 11 Howard
Down Turbine, as reported in your Excess Emissions Report #SUB200002,
therefore you failed to fulfill all conditions and provisions of your Title V
Operating Permit, U11 - OS1 - Reference #5.DATES
11/9/19

5. Therefore, the Department has determined that the VINELAND MUNICIPAL ELECTRIC UTILITY HOWARD M. DOWN is liable for civil administrative penalties totaling \$127,800.00 for the above referenced violations pursuant to N.J.S.A. 26:2C-19 and N.J.A.C. 7:27A-3.1 et seq.

- 8. The Department and VINELAND MUNICIPAL ELECTRIC UTILITY HOWARD M. DOWN have agreed to settle this matter in accordance with the following terms:
 - a. The Department has determined that the above violations have been corrected and thus is willing to accept a reduced penalty as follows. VINELAND MUNICIPAL ELECTRIC UTILITY HOWARD M. DOWN agrees to operate in compliance with all applicable regulations and permits.
 - b. In full settlement of the aforementioned violation(s) VINELAND MUNICIPAL ELECTRIC UTILITY HOWARD M. DOWN shall pay a penalty of \$95,850.00 by check made payable to "Treasurer, State of New Jersey" and remit to the Division of Revenue at the address stated on the enclosed invoice within thirty (30) calendar days from the date of full execution of this Settlement Agreement.
 - c. Neither the entry into this Settlement Agreement nor the payment of the settlement amount shall constitute an admission of liability by VINELAND MUNICIPAL ELECTRIC UTILITY HOWARD M. DOWN for the violations listed herein.
 - d. If VINELAND MUNICIPAL ELECTRIC UTILITY HOWARD M. DOWN fails to pay the above reduced penalty in accordance with the terms and conditions of this Settlement Agreement, then VINELAND MUNICIPAL ELECTRIC UTILITY HOWARD M. DOWN is liable for the full penalty amount. The full penalty amount will be included in a formal enforcement action that will also include formal withdrawal of this settlement agreement.
 - e. Nothing in this Settlement Agreement shall preclude the Department from taking enforcement action against VINELAND MUNICIPAL ELECTRIC UTILITY HOWARD M. DOWN for violations not set forth in this Settlement Agreement.
 - f. VINELAND MUNICIPAL ELECTRIC UTILITY HOWARD M. DOWN hereby waives its right to an administrative hearing with respect to the violation(s) which are listed in paragraph 3.above.
 - g. Nothing in this Settlement Agreement restricts the ability of the Department to raise the above findings in any other proceeding, specifically including, but not limited to, proceedings pursuant to N.J.S.A. 13:1E-126 et seq., (commonly referred to as A-901).
 - h. This Settlement Agreement shall be effective upon execution by both parties. The Department does not waive its right to consider any violations set forth above as an offense in determining penalties in any future enforcement action.

VINELAND MUNICIPAL ELECTRIC UTILITY HOWARD M. DOWN NEA210001 - 75507 Page 22 of 22

NJ Department	of Environmental Protection
---------------	-----------------------------

DATE: _____

Mary M. Toogood, Manager Bureau of Air Compliance & Enforcement-Southern

VINELAND MUNICIPAL ELECTRIC UTILITY HOWARD M. DOWN

DATE:____

BY:

BY: