RACT III PROPOSAL

Sewage Sludge Incinerators #1 and #2 Case-by-Case RACT

Delaware County Regional Water Quality Control Authority (DELCORA) / DELCORA Western Regional Treatment Plant Chester, PA

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Delaware County Regional Water Quality Control Authority (DELCORA) operates the wastewater treatment facility known as the Western Regional Treatment Plant (WRTP), located in the City of Chester, Delaware County, Pennsylvania. The facility currently operates under Title V Permit #23-00038, issued on December 17, 2018 and revised on May 2, 2022. DELCORA is a major nitrogen oxide (NO_x) emitting facility. Note that DELCORA submitted a Title V renewal application six months prior to the current permit's expiration date, which is now being reviewed by the PADEP. Because of this, they are covered by the permit shield of their current permit.

DELCORA WRTP is permitted to accept 44 million gallons per day of municipal and industrial wastewater from connected sources within the county as well as additional wastewater deliveries via tank truck from contracted wastewater sources. The wastewater treatment plant is a continuous once-through process that begins with wastewater entering and passing sequentially through the process tanks until treated water is discharged to the Delaware River. Influent wastewater enters two (2) aerated grit chambers for removal of heavy, mostly inorganic materials. The de-gritted wastewater is conveyed to eight (8) rectangular primary clarifiers for suspended solids removal. Primary effluent is conveyed to four (4) square activated sludge aeration basins for aerobic biological treatment, and the aeration basin mixed liquor is then conveyed and distributed to a total of six (6) circular final clarifiers. Clarified effluent flows to two (2) chlorine contact tanks for disinfection utilizing chlorine gas followed by sodium bisulfite for dechlorination before final discharge into the Delaware River. The tanks are uncovered, and fugitive volatile organic compounds (VOCs) are emitted if the influent wastewater contains VOC.

Solids removed from the primary clarifiers is blended with thickened solids from the final clarifiers and solids received via truck from contracted wastewater sources and stored in four (4) covered sludge holding tanks that vent through a bioscrubber for odor control. Sludge from the sludge holding tanks is dewatered by four (4) belt filter press contained in a building which vents to a packed tower chemical odor scrubber located in the same building. The packed tower chemical scrubber controls reduced sulfur and nitrogen compounds in addition to hydrogen sulfide.

Dewatered sludge solids are incinerated in two (2) multiple hearth sewage sludge incinerators which emit NOx, CO, VOC and HAPs. Incinerator emissions are controlled by venturi and impingement scrubbers followed by wet electrostatic precipitators (WESP) and then regenerative thermal oxidizers (RTO). The incinerator controls were installed in 2016 and are addressed under plan approval 23.0038F. DELCORA also operates four (4) gas-fired small boilers less than 2 MMBtu/hr for building heat.

The Pennsylvania Department of Environmental Protection (PADEP) published 25 Pa. Code, Chapter 129: Additional RACT Requirements for Major Sources of NOX and VOCs for the 2015 Ozone NAAQS (the "RACT III Rule") in the Pa Bulletin on November 12, 2022 (52 Pa. Bulletin 6960). On July 30, 2024, Delaware County, Pennsylvania, was reclassified as a serious nonattainment area for the 2015 Ozone National Ambient Air Quality Standards (NAAQS). Following the email received on November 5, 2024, DELCORA is submitting this proposal to comply with the regulations under 25 Pa. Code § 129.114(b), which covers alternative Reasonably Available Technology (RACT) proposals and petition for alternative compliance schedules.

This proposal contains the alternative RACT requirement, specified in 25 Pa. Code 129.114(d), and provides case-by-case NO_X RACT determinations for the facilities Nos. 1 and 2 Sewage Sludge Incinerators (SSIs), Source ID Nos. 001 and 002.

1.1 RACT Requirements

The RACT III Rule applies to existing major facilities of NOX and/or VOC throughout Pennsylvania. Existing major facilities are those facilities which are a major source of NOX and/or VOC that exist on or before August 3, 2018 and existing minor facilities which become a major source of NOX and/or VOC after August 3, 2018. DELCORA is located in Delaware County, where the NO $_{\rm X}$ and VOC major sources thresholds are 50 and 50 tons per year (tpy), NOx and VOC due to Delaware County now being classified as serious for ozone. DELCORA now meets the definition of an existing major source NO $_{\rm X}$ due to having a Plant Wide Applicability Limit (PAL) of 82.56 tpy per Section C, Condition #003 of the TVOP As such, the Facility is subject to NO $_{\rm X}$ RACT requirements.

RACT is defined in 25 Pa Code 121.1 as "the lowest emission limit for VOC or NOX that a particular source is capable of meeting by the application of control technology that is reasonably available considering technological and economic feasibility." For sources subject to RACT, under Pennsylvania's regulations, there are three options for compliance:

- Compliance Option 1: Presumptive RACT¹.
- ▶ Compliance Option 2: System-wide averaging²; and
- Compliance Option 3: Case-by-case RACT determination³.

Below is a list of all sources subject to NO_x RACT requirements, as well as the compliance option applicable to each source:

- ▶ Source ID #030, Five (5) Natural Gas Fired Boilers Exempt per initial Section 129.115(a) submittal
- ▶ Source ID #001, SSI #1 Case-by-case RACT Proposal, included in this document
- ▶ Source ID #002, SSI #2 Case-by-case RACT Proposal, included in this document

This RACT proposal consists of the following sections:

- ► Section 1: Executive Summary
- Section 2: Notification Summary
- Section 3: Case-by-Case RACT Analysis
- ► Section 4: RACT Proposal

The following attachments are enclosed with this application:

- Appendix A. RBLC Results
- ▶ Appendix B. Title V Permit Application Forms
 - Title V Permit Application Form
 - Compliance Review Form
- Appendix C. Municipal Notifications

¹ 25 Pa Code 129.112

² 25 Pa Code 129.113

³ 25 Pa Code 129.114

This section of the report serves as the written notification, specified in 25 Pa Code §129.115(a), that describes how DELCORA proposes to comply with the requirements of 25 Pa Code §129.111-129.115, for Case-by-Case RACT review per Section 129.114(d) for Source ID 001 and 002.

2.1 Emissions Unit and RACT III Compliance Strategy

The proposed RACT III compliance strategy for each emission unit at DELCORA is provided in Tables 2-1 and 2-2. These tables serve to identify the air contamination sources at DELCORA and identify the applicable RACT requirements or exemption status as specified in 25 Pa Code §129.115(a).

DELCORA is submitting the following information as part of the RACT III initial notification requirements:

- ▶ 25 Pa Code §129.115(a)(1) Submit the initial notification by February 28th, 2025.
 - This initial notification has been submitted via PADEP OnBase on January 24, 2025.
- ➤ 25 Pa Code §129.115(a)(2) Identify the air contamination sources in 25 Pa Code §129.111(a) as subject to a RACT requirement or exempt
 - See Table 2-1 below.
- ➤ 25 Pa Code §129.115(a)(3) Identify the air contamination sources in 25 Pa Code §129.111(b) as subject to a RACT requirement or exempt
 - Not applicable, the Facility is an existing major source of NO_x.
- ➤ 25 Pa Code §129.115(a)(4) Identify the air contamination sources in 25 Pa Code §129.111(c) which are exempt
 - See Table 2-1 below.
- ▶ 25 Pa Code §129.115(a)(5) Provide a description of each air contamination source listed in 25 Pa Code §129.115(a)(2) including, description, make, model and location, applicable RACT requirement, how the unit will comply with RACT III, and reason for exemption (if applicable).
 - See Table 2-1 below and the source descriptions in Section 2.2.
- ▶ 25 Pa Code §129.115(a)(6) Provide a description of each air contamination source listed in 25 Pa Code §129.115(a)(3) including, description, make, model and location, applicable RACT requirement, how the unit will comply with RACT III, and reason for exemption (if applicable).
 - Not applicable, the Facility is an existing major source of NO_x and is not subject to (a)(3).
- ▶ 25 Pa Code §129.115(a)(7) Provide a description of each air contamination source listed in (a)(4) including, description, make, model and location and information sufficient to demonstrate that the source has a PTE less than 1 tpy of NOX or 1 tpy of VOC, as applicable.

- RACT III Exemption memo for Source ID 030 Submitted via PADEP OnBase January 24, 2025.
- See the source descriptions in Section 2.2.

Table 2-1: NO_x Sources Subject to RACT III

Emissions Source ID	Source Description	NO _x RACT Compliance Strategy
030	Five Natural Gas Fired Boilers	Exempt from RACT III – 25 Pa Code 129.111(c) (Initial Notification submitted to PADEP on January 24, 2025)
001	Sewage Sludge Incinerator #01	Case-By-Case – 25 Pa Code 129.114(d)
002	Sewage Sludge Incinerator #02	Case-By-Case – 25 Pa Code 129.114(d)

2.2 Source Description and Applicable Limits

The following section provides source descriptions for each unit at DELCORA as well as the applicable Presumptive RACT III emission limits. The information provided in this section is required under 25 Pa Code §129.115(a)(5) and 25 Pa Code §129.115(a)(7).

2.2.1 Source ID 030, B-2 & B-3 Boilers (5 Total)

Table 2-2: Source ID 030 Specification Information

Location/Boiler Name	Heat Input Rating (MMBTU/hr)	Manufacturer	Model Number
Building 2, Boiler #1	1.26	Cyclonetic	JB1G-030RM7897C-
			M.12-UL/CSD-1
Building 2, Boiler #2	1.26	Cyclonetic	JB1G-030RM7897C-
			M.12-UL/CSD-1
Building 3, Boiler #1	1.50	Lochinvar	FBN1501
Building 3, Boiler #2	1.50	Lochinvar	FBN1501
Building 3, Boiler #3	1.50	Lochinvar	FBN1501

As per 25 Pa. Code § 129.111(c), 25 Pa. Code sections §§ 129.112-129.114 do not apply to the owner or operator of an air contamination source that has the potential to emit less than 1 TPY of NO_X . Potential to emit calculations for Source ID 030 were submitted with the initial notification letter in January of 2024. The PTE calculations show each of the five (5) boilers has the potential to emit less than 1 tpy of NO_X . Therefore, the five (5) boilers operated by DELCORA are not subject to RACT III requirements.

2.2.2 Source ID 001 & 002, Sewage Sludge Incinerators 1 & 2

Table 2-3: Source ID 001 and 002 Specification information

Unit Name	Total Heat Input Rating (MMBTU/hr)	Fuel Type	Material Processed	Material Load (tpy)	Manufacturer	Model Number
SSI 1	30.4	Natural Gas	Sewage Sludge	>290	Nichols-Herrshoff	22′3′O.D. X 8 HEARTH
SSI 2	30.4	Natural Gas	Sewage Sludge	>290	Nichols-Herrshoff	22′3′O.D. X 8 HEARTH

DELCORA operates two (2) Sewage Sludge Incinerators (SSI) (Source IDs 001 and 002) located near the sludge processing building. There are no presumptive NOx RACT emissions limits specified in section 129.112 that are applicable to the SSIs. Under TVOP 23-00038 DELCORA has accepted a plant applicability limit (PAL) of 82.56 tpy NO_x on a 12-month rolling total basis (12MRT). This PAL will be used as a potential to emit value for each of the SSIs. Therefore, these two sources will be subject to Case-by-Case RACT review for which a proposal per Section 114(d) will be submitted by February 28, 2025.

As an existing major source of both NO_x, the Facility is subject to Pennsylvania's RACT regulations. As discussed above, SSIs No. 1 & 2 are not included in the source categories for which the regulations include presumptive RACT NO_x limits. Therefore, these sources are subject to a case-by-case RACT determination per Section 129.114(b).

3.1 Case-by-Case RACT Determination

For sources which are unable to meet presumptive RACT limits and don't participate in system-wide averaging, and sources which do not qualify for one of the source categories that have presumptive RACT limits, the third option for RACT compliance applies. Under this third option, facilities must propose an alternative RACT emission limitation (i.e., a "case-by-case RACT limit") and apply for a case-by-case RACT limit or requirement via a Plan Approval (if RACT compliance requires the installation of controls) or operating permit modification from PADEP. SSIs No. 1 & 2 are subject to a case-by-case NO_x RACT determination. Pursuant to 25 Pa Code 129.114(b) and 25 Pa. Code 129.114(d), the case-by-case RACT limit proposal must include each of the elements required under 25 Pa Code 129.92(a)(1)-(5), (7)-(10). Table 3-1 includes a cross reference for the location of these requirements in this RACT proposal DELCORA.

Regulatory Requirement Location in Proposal 25 Pa Code A list of each source subject to the RACT requirements Section 1.1 129.92 (a)(1) The size or capacity of each affected source and types of 25 Pa Code Submitted in January 129.92 (a)(2) fuel combusted or the types and quantities of materials 2025 initial notification, processed or produced in each source. Table 2-2 and 2-3 25 Pa Code A physical description of each source and its operating Section 1 characteristics. 129.92 (a)(3) 25 Pa Code Estimates of the potential and actual NOX and VOC Facility Wide PAL 82.56 emissions from each source and associated supporting 129.92 (a)(4) tpy NO_x documentation. 25 Pa Code A RACT analysis which meets the requirements of subsection Section 3 129.92 (a)(5) (b), including technical and economic support documentation for each affected source. 25 Pa Code The testing, monitoring, recordkeeping and reporting Section 4 129.114(d)(6) procedures proposed to demonstrate compliance with RACT. 25 Pa Code An application for an operating permit amendment or Appendix B 129.114(d)(2) application to incorporate the provisions of the RACT proposal.

Table 3-1

3.2 Top-Down Methodology

Case-by-case RACT determinations are traditionally based on a top-down methodology. PADEP has outlined the required elements of a RACT analysis and determination in 25 Pa Code 129.92(b). Presented below are the five basic steps of the top-down RACT review as identified by PADEP.

3.2.1 Step 1: Identify All Control Technologies

Under Step 1, all available control technologies are identified for each emission unit in question. The following methods may be used to identify potential technologies:

- ▶ Researching the RACT/BACT/LAER Clearinghouse (RBLC) database;
- Surveying regulatory agencies;
- Drawing from previous engineering experience;
- ▶ Surveying air pollution control equipment vendors; and
- Surveying available literature.

Once identified, the control technologies are ranked in descending order of expected control effectiveness.

3.2.2 Step 2: Eliminate Technically Infeasible Options

After control technologies are identified under Step 1, an analysis is conducted to eliminate technically infeasible options. A control option is eliminated from consideration if there are process-specific conditions that prohibit the implementation of the control technology or if the highest control efficiency of the option would result in an emission level that is higher than any applicable regulatory limits, such as a New Source Performance Standard (NSPS) or National Emission Standard for Hazardous Air Pollutants (NESHAP).

3.2.3 Step 3: Rank Remaining Control Technologies by Control Effectiveness

In Step 3, remaining control technology options are ranked based on their control effectiveness, from highest to lowest control efficiency. This list must identify, at a minimum, the baseline emissions of VOCs and NOx before implementation of each control option, the estimated reduction potential or control efficiency of each control option, the estimated emissions after the application of each control option and the economic impacts.

3.2.4 Step 4: Evaluate Most Effective Controls and Document Results

Beginning with the highest-ranked control technology option from Step 3, detailed economic, energy, and environmental impact evaluations are performed in Step 4. If a control option is determined to be economically feasible without adverse energy or environmental impacts, it is not necessary to evaluate the remaining options with lower control efficiencies.

The economic evaluation centers on the cost effectives of the control option. Costs of installing and operation control technologies are estimated and annualized following the methodologies outlined in the U.S. EPA's Office of Air Quality Planning and Standards (OAQPS) Control Cost Manual (CCM) and other industry resources.⁴

3.2.5 Step 5: Select RACT

Using the result of the prior steps to determine the appropriate control technology, the final step is to determine the emission limit that represents the RACT limit

⁴ OAQPS, U.S. EPA Air Pollution Control Cost Manual , Sixth Edition, EPA 452-02-001 (https://www3.epa.gov/ttn/ecas/cost_manual.html), Daniel C. Mussatti & William M. Vatavuk, January 2002. Note that Section 4 of the CCM was updated (Seventh Edition) in May 2016. However, the remainder of the CCM has not yet been updated and the Sixth Edition is still the most recent.

NO_x RACT Assessment for SSIs 3.3

This section addresses NO_x RACT requirements for SSI #001 and SSI #002. Natural gas and municipal waste sludge combustion in the SSIs produce NO_x emissions from these sources. The combustion of natural gas and municipal waste sludge in these SSIs results in NO_x emissions. The NOX emissions from these chemical mechanisms are referred to as: 1) thermal NO_X, 2) fuel NO_X, and 3) prompt NO_X.

Thermal NOX is generated by the oxidation of molecular nitrogen (N2) in the combustion air as it passes through the flame in the incinerator. This reaction requires high temperatures, hence the name thermal NO_x. The formation of nitrogen oxide (NO) from oxygen (O2) and N2 in air at high temperatures is described by the well-known Zeldovich mechanism. Fuel NOx is the result of the conversion of nitrogen compounds contained in fuels to NO_x during fuel combustion. For all practical purposes, prompt NO_x, which can be significant in low-temperature, fuel-rich conditions where residence times are short, is not important in the sewage sludge incineration process. In a SSI due the presence of natural gas and municipal waste solids acting as fuel sources, fuel NO_x is the predominate mechanism for NO_x formation.⁵

The RACT evaluation review of NO_x from the incinerators at DELCORA focuses on verifying that the technologies for NO_X control on the furnaces meet RACT and not on attempting to compare emission rates themselves.

Step 1 – Identify All Control Technologies for NO_X 3.3.1

Step 1 in a top-down analysis is to identify all available control technologies. The evaluation of potential controls for NO_X emissions from the SSIs involves an investigation of end-of-pipe (post-combustion) and combustion modifications/optimization that reduce the formation of fuel NO_x. The complicating factor in efforts to reduce fuel NO_x is the basics municipal waste solids combustion. Reducing fuel input, while maintaining the current regulated feed rate of municipal waste solids would greatly reduce the effectiveness of waste destruction. Therefore, only end-of-pipe NO_x reduction control technologies will be investigated.

The RBLC database was reviewed to identify potential add-on control technologies for processes similar to the sewage sludge incineration process. Results of the RBLC search for municipal waste combustion (Process Type 21-400) are provided in Appendix A. It should be noted that the RBLC search results presented include RACT determinations as well as any BACT and LAER determinations, which may be more stringent than RACT. Table 3-2 contains a list of the various technologies that have been identified for control of NO_x emissions from the sludge incineration process.

Table 3-2 Potentially Available NO_x Control Technologies for Incinerators

Potentially Applicable NO _x Control Technologies				
Selective Catalytic Reduction (SCR)				
Selective Non-Catalytic Reduction (SNCR)				
Good Combustion Practices / Proper Incinerator Operation				
Low NO _x Burners (LNBs)				

Other general NO_X control technologies exist in addition to those listed in Table 3-2 that are widely used for NO_x control on traditional large combustion sources. However, several of these have been identified as not

⁵ U.S. EPA, "Summary of NOx Control Technologies and their Availability and Extent of Application." File Number EPA 450/3-92-004. February

applicable for use on incinerators and therefore have not been considered for this top down RACT assessment for NO_x. These technologies include, but are not limited to:

- Fuel gas recirculation (FGR),
- Staged air combustion, and
- Reburn,

Based on our research, none of the technologies listed above apply to sewage sludge incineration or have been commercially demonstrated on incinerators (as they are more likely applicable to traditional combustion units such as boilers or turbines) and therefore are deemed technically infeasible in our case and have been eliminated as potential RACT technologies.

3.3.2 Review of Potentially Applicable NO_X Control Technologies

The following section provides a discussion of each potentially applicable technology identified above as it might be applied to the incinerators at DELCORA.

3.3.2.1 Selective Catalytic Reduction (SCR)

SCR is a post-combustion gas treatment process in which NH₃ is injected into the exhaust gas upstream of a catalyst bed. On the catalyst surface, ammonia and NO_x react to form elemental nitrogen and water. The primary chemical reactions can be expressed as follows:

$$4 NH_3 + 4NO + O_2 \rightarrow 4N_2 + 6H_2O$$

 $4 NH_3 + 4NO_2 + 2O_2 \rightarrow 3N_2 + 6H_2O$

When operated within the optimum temperature range of 480 to 800°F, the reaction can result in removal efficiencies between 70 and 90 percent.⁶ Operation outside the optimum temperature range can result in increased ammonia slips or increased NO_x emissions.

SCR units have the ability to function effectively under fluctuating temperature conditions (usually ± 50 °F), although fluctuation in exhaust gas temperature reduces removal efficiency slightly by disturbing the kinetics (speed) of the NOx removal reaction.

3.3.2.2 Selective Non-Catalytic Reduction (SNCR)

SNCR is a post-combustion NOx control technology based on the reaction of urea or ammonia with NOx. In the SNCR chemical reaction, urea $[CO(NH_2)_2]$ or ammonia (NH_3) is injected into the combustion gas path to reduce the NOx to nitrogen and water. The overall reaction schemes for both urea and ammonia systems can be expressed as follows:

$$CO(NH_2)_2 + 2NO + \frac{1}{2}O_2 \rightarrow 2N_2 + CO_2 + 2H_2O$$

 $4NH_3 + 6NO_2 \rightarrow 5N_2 + 6H_2O$

Typical removal efficiencies for SNCR range from 25 to 65 percent. An important consideration for

⁶ U.S. EPA, Office of Air Quality Planning and Standards. *OAQPS Control Cost Manual Section 4 Chapter 2, 7th edition*. Research Triangle Park, NC. May 2016.

implementing SNCR is the operating temperature range. The optimum temperature range is approximately 1,550 to 1,950°F.⁷ Operation at temperatures below this range results in ammonia slip. Operation above this range results in oxidation of ammonia, forming additional NO_x.

3.3.2.3 Good Combustion Practices / Proper Incinerator Operation

The formation of NOx is minimized by proper furnace design and operation. Generally, emissions are minimized when the furnace temperature is kept at the lower end of the desired range and when the distribution of air at the air and fuel injection zones is controlled. Ideally, maintaining a low-oxygen condition near fuel injection points approaches an off-stoichiometric staged combustion process.

A certain amount of air is required to provide sufficient oxygen to burn all of the fuel. However, any excess air contributes to increased NOx emissions in two ways: 1) Excess air effectively increases the amount of air that must be heated, resulting in decreased fuel efficiency and higher NOx emissions, and 2) Excess air provides greater amounts of oxygen in the combustion zone that will lead to greater amounts of thermal NOx formation. By minimizing the amount of air used in the combustion process while maintaining proper furnace operation, the formation of NOX can be reduced.

3.3.2.4 Low NO_X Burners (LNBs)

The principle of all LNBs is the same: stepwise or staged combustion and localized exhaust gas recirculation at the flame. LNBs are designed to control fuel and air mixing to create larger and more branched flames. Peak flame temperatures are reduced, resulting in less NOx formation. LNBs eliminate the need for steam or water injection, which was formerly the traditional method of NOx control. In addition to traditional LNB regenerative burners are low NOx design but also utilize a pair of burners which cycle to alternately heat the combustion air or recover and store the heat from the furnace exhaust gases to improve burner efficiency.

3.3.3 Step 2 – Eliminate Technically Infeasible Options for NO_x Control

Step 2 in a RACT top-down analysis is to eliminate the control options identified in Step 1 which are technically infeasible. The remaining technologies are then carried into Step 3.

3.3.3.1 Selective Catalytic Reduction (SCR)

The SCR process is temperature sensitive. Any exhaust gas temperature fluctuations reduce removal efficiency and upsets the NH₃/NO_x molar ratio. SCR also requires an optimum temperature range of 575°F to 750°F and fairly constant temperatures, or NO_x removal efficiency will decrease. Below this temperature range, the reaction rate drops sharply, and effective reduction of NO_x is no longer feasible. Above this temperature, conventional reduction catalysts break down and are unable to perform their desired functions. Additionally, streams with high volumes of particulate matter (PM) can require additional control measures to reduce PM deposition into the catalyst.⁸

Due to the large volumes of PM emissions from the SSI process DELCORA has installed an electrostatic precipitator and a venturi scrubber to control PM emissions from the SSIs. These PM controls reduce the exhaust temperature of the SSIs to 105°F, well below the effective range of a SCR. Additionally, the SCR could not be installed prior to the PM control equipment. This would lead to significantly greater

⁷ U.S. EPA, Office of Air Quality Planning and Standards. *OAQPS Control Cost Manual Section 4 Chapter 1*, 7th edition. Research Triangle Park, NC. May 2016.

⁸ U.S. EPA, Technology Transfer Network, Clean Air Technology Center. "Air Pollution Control Technology Fact Sheet – Selective Catalytic Reduction." File number EPA-452/F-03-032. July 2003. http://www.epa.gov/ttn/catc/dir1/fscr.pdf (26 Nov. 2014).

construction costs as well as significant PM deposition into the catalytic medium, leading to catalytic deactivation, and completely removing the control efficiency of the SCR. Therefore, SCR is deemed infeasible for DELCORAs SSIs and will not be discussed further in this section.

3.3.3.2 Selective Non-Catalytic Reduction (SNCR)

SNCR requires a high but very specific temperature range (generally between 1,550 °F and 1,950 °F) and sufficient residence time at this temperature to be effective. The average operating temperature for a multiple hearth sewage sludge incinerator, like those at DELCORA is between 800°F and 1,700°F.9 While this value is above the 1,550°F SCNR threshold operating temperature, PM control equipment installed at DELCORA greatly reduces the exhaust temperature to 105°F. The variable temperature range due to the nature of sewage sludge incineration as well as already in place PM control measures would likely reduce exhaust temperatures well below the 1,550°F SCNR threshold operating temperature, leading to ammonia slip and increasing harmful ammonia emissions. Therefore, SNCR is deemed infeasible for DELCORAs SSIs and will not be discussed further in this section.

3.3.3.3 Good combustion Practices/ Proper Incinerator Operation

The formation of NOx can be minimized by proper furnace operation. Generally, emissions are minimized when the furnace temperature is kept at the lower end of the desired range and when the distribution of air at the air and fuel injection zones is controlled. Ideally, maintaining a low-oxygen condition near fuel injection points approach an off-stoichiometric staged combustion process. Completing combustion in a low-oxygen condition is impossible within a SSI, as 50-100% excess air is required to ensure the complete combustion of the sewage sludge.¹⁰

A high thermal efficiency would lead to less consumption of heat and fuel and would produce less NOx emissions. General improvement in thermal efficiency is one design method of reducing NOx formation, since less fuel is used. Steady sludge feed rates, and continuous high temperature combustion will ensure that the SSI does not require excess fuel for complete sludge combustion.

Good combustion practices and proper incinerator design is a technically feasible method for controlling NO_X emissions from the incinerators. This method has been cited in the RBLC as BACT for NO_X for other similar processes.

3.3.3.4 Low NO_X Burners (LNBs)

Incinerators are traditionally direct fired which limits the various forms of LNB to burner design. As previously discussed, LNBs differ from traditional burners in that the flames produced are larger with more branched flames (i.e., longer, lazier flame shapes) and therefore the peak flame temperature is usually lower. Burner flame properties in a SSI are critical to ensure complete combustion of fuel gas as well as solid waste.

Low NO_x burners are a technically infeasible option for SSIs, this is due to the 50-100% excess air required to ensure complete combustion of the sewage sludge. This excess air disrupts the ideal fuel-to-gas ratio necessary for LNBs to operate effectively. Additionally, a review of the EPA's RBLC database indicates that LNBs have not been commercially demonstrated on SSIs in the U.S. Therefore, LNBs are deemed infeasible for DELCORA's SSIs and will not be discussed further in this section.

⁹ U.S. EPA, "Second Review of Standards of Performance for Sewage Sludge Incinerators." File Number EPA-450/3-84-010. March 1984.

¹⁰ U.S. EPA, "Second Review of Standards of Performance for Sewage Sludge Incinerators." File Number EPA-450/3-84-010. March 1984.

3.3.4 Step 3 – Rank Remaining Control Technologies by Control Effectiveness

In step 3, the remaining control technology options are ranked based on their control effectiveness, from highest to lowest control efficiency. There is one (1) control technology that is considered technically feasible, Good Combustion Practices/Proper Incinerator Operation.

3.3.5 Step 4 – Evaluate Most Cost Effective Controls and Document Results

One (1) control technology remained after the technical feasibility analysis of Step 2. A cost analysis was not conducted for this case-by-case RACT determination since DELCORA is already operating utilizing good combustion practices and proper incinerator operation.

3.3.6 Step 5 – Select RACT

For Step 5, DELCORA will maintain good combustion practices and proper incinerator operation. For SSIs #001 and #002, a NO_x emissions limit of 65.7 tons per year (TPY) (15 lb/hour per incinerator) has been established as RACT in Title V Operating Permit (TVOP) No. 23-00038. Additionally, DELCORA has been granted a Plant-wide Applicability Limit (PAL) of 82.56 TPY for NO_x. By adhering to current combustion and SSI operation practices, DELCORA will continue to comply with the emissions limitations specified in their TVOP and the PAL, ensuring adherence to RACT requirements.

As detailed in Section 3, there are no technically feasible NO_x control technologies for the sewage sludge incinerators #001 and #002 which are not already utilized. As such, DELCORA is proposing to utilize good combustion and proper incinerator practices on SSIs. The proposed RACT requirements for each SSI is provided in the table below.

Table 4-1 Proposed RACT for SSI #001 & #002

Emissions Source ID(s):	 Sewage Sludge Incinerator #001, Title V Source ID 001 Sewage Sludge Incinerator #002, Title V Source ID 002 		
Source Description(s):	Dewatered sludge solids are incinerated in two (2) multiple hearth sewage sludge incinerators which emit NOx, CO, VOC and HAPs. Incinerator emissions are controlled by venturi and impingement scrubbers followed by regenerative thermal oxidizers (RTO).		
Description of RACT:	Case-by-case		
	Good combustion practices and proper incinerator operation		

Proposed Emissions Restriction:

- 67.7 TPY NO_x (per incinerator)
- 15 lb/hour NO_X (per incinerator)
- 82.56 TPY NO_X, facility wide

Proposed Work Practices:

Proposed Monitoring: Per Section E, Source Group #01, Condition #008:

- Temperature of hearths 1-6 per incinerator, continuously
- Fuel combusted on a daily and monthly basis,
- Ouantity of sewage sludge incinerated on a continuous basis

Proposed Testing: Per Section D, Source ID 001 and 002, Condition #001:

• Perform stack tests once every five (5) calendar years

Proposed Recordkeeping: Per Section E, Source Group #01, Condition #0012, DELCORA will maintain the following records for a minimum of five (5) years:

- Temperature of hearths 1-6 per incinerator, continuously
- Fuel combusted on a daily and monthly basis, 12MRT
- Quantity of sewage sludge incinerated on a dry basis, daily
- Dates, times and reason for any cessation of charging of sewage sludge to the incinerator other than for routing maintenance or planned outages
- Continuous oxygen content of the incinerator exhaust gas
- Manufacturers specifications for the instillation, maintenance and operation of burners
- Stack testing protocols
- Instrument calibration checks and maintenance reports

Proposed Reporting: Compliance with work practices reported annually via Title V Compliance Certification

APPENDIX A. RBLC DATABASE SEARCH

	RBCL Search Results for NOx, 21.400 - Municipal Waste Combustion						
RBLC ID	Facility Name	Permit Date	Source	Primary Fuel	Pollutant	Type of Requirement	Pollution Prevention / Add-on Control Description
AK-0084	DONLIN GOLD PROJECT	6/30/2017	Incinerator (Sewage Sludge)		Nitrogen Oxides (NOx)	BACT-PSD	Good Combustion Practices
FL-0324	PALM BEACH RENEWABLE ENERGY PARK	12/23/2010	Three Municipal Solid Waste Combustors (MSW)	MSW	Nitrogen Oxides (NOx)	BACT-PSD	Seelctive Catalytic Reduction (SCR)
PR-0009	ENERGY ANSWERS ARECIBO PUERTO RICO RENEWABLE ENERGY PROJECT	4/10/2014	Two Identical Municipal Solid Waste Combustors Units	municipal solid waste	Nitrogen Oxides (NOx)	BACT-PSD	Regenerative Selective Catalytic Reduction System
VA-0329	COVANTA ALEXANDRIA/ARLINGTON INC	2/8/2019	three (3) municipal waste combusters		Nitrogen Oxides (NOx)	RACT	Emissions will be controlled by furnace design, proper operation, good combustion practices, ammonia injection (selective non-catalytic reduction (SNCR), and the Covanta proprietary low NOX combustion system (LNTM).
VA-0330	COVANTA FAIRFAX, INC.	2/8/2019	Four (4) municipal waste combustors		Nitrogen Oxides (NOx)	RACT	Controlled by furnace design, proper operation, ammonia injection (selective non-catalytic reduction (SNCR)), and the Covanta proprietary low NOX combustion system (LNTM).

APPENDIX B. TITLE V APPLICATION FORMS

*DELCORA submitted a TVOP Renewal Application in May of 2023, a new permit has yet to be issued from this renewal application. There will be no changes to DELCORA's permit application forms as a result of this RACT III proposal.

- Title V Application Forms
- Compliance Review Form



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF AIR QUALITY

FOR OFFICIAL USE ONLY	
Title V OP Number:	_
Reviewed by:	_
Date:	_

TITLE V OPERATING PERMIT APPLICATION

Section 1 - General Information					
1.1 Application Type					
Type of permit for which application is made: (Check one)					
☐ Initial					
Renewal Operating Permit No. 23-00038					
Application Revision - provide date of original Title V Application or OP No.:					
1.2 Plant Information					
Federal Tax ID/Plant Code: 23-7182698-1					
WESTERN REGIONAL TREATMENT PLANT Plant Name: (WRTP)					
NAICS Code: 221320 SIC Code: 4952					
Description of NAICS Code: Sewage Treatment Facilities					
Description of SIC Code: Trans. & Utilities - Sewerage Systems					
County: Delaware Municipality Chester					
Latitude: 39° 49 31.8900 Longitude: -75° 23 38.3700					
Horizontal Reference Datum: North American Datum of 1983					
Geographic coordinate determination method based on GPS code measurements (pseudo range) differential (DGPS)					
Reference Point: Plant entrance (general) - The general entrance to a plant					
1.3 Contact Information					
Name: IRENE FITZGERALD Title: ENV PROGRAMS MANAGER					
Address: PO BOX 999					
100 E 5TH ST, CHESTER, PA 19016-0999					
Telephone Number: (610) 876 - 5523 Ext.213					
Email Address: fitzgeraldi@delcora.org					
1.4 Certification of Truth, Accuracy and Completeness					
Note: This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.					
I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate, and complete.					
(Signed) Mutan 9 Skender Date: May 5, 2023					

Name (Typed):	Michael DiSantis	Title:	Director of Operations and Maintenance
(1)			

lote: A Method of Compliance Worksheet (Addendum 1) must be completed for each requirement listed. For renewals, only list site level requirements not included in the current little V Operating Permit. If there are no changes, check the box to the listed.					
Describe and cite all applicable requirements pertaining to the entire site. Note: A Method of Compliance Worksheet (Addendum 1) must be completed for each requirement listed.					
Citation No.	Citation Limitation	Limitation Used			

Section 3 - Site Inventory

Give a complete list of all air pollution sources, control equipment, emission points, and fuel material locations within this site.

For renewals, only list sources not included in current Title V Operating Permit or sources which are now subject to Compliance Assurance Monitoring (CAM) requirements of 40 CFR Part 64. If preprinted information is provided, correct and/or add any new sources as necessary. Note: one (1) of the following sections (5, 6 or 7) of the application must be completed for each new source listed here.

Unit ID	Company Designation	Unit Type	CAM
030	B-2 & B-3 Boilers (4 Total)	Combustion Unit	
001	Sewage Sludge Incinerator 1	Incinerator	
002	Sewage Sludge Incinerator 2	Incinerator	
110	Wastewater Treatment Process	Process	
111	4-250,000 Gal Sludge Holding Tanks	Process	
C04	Belt Filter Press Room Process Scrubber	Control Device	
C05	Sludge Holding Tanks & Bldg B-4 Scrubber	Control Device	
C06	Quench & Multi-Venturi Scrubber Ssi 001	Control Device	
C07	Quench & Multi-Venturi Scrubber Ssi 002	Control Device	
C10	Wet Electrostatic Precipitator Ssi 001	Control Device	
C11	Wet Electrostatic Precipitator Ssi 002	Control Device	
C12	Regenerative Thermal Oxidizer Ssi 001	Control Device	
C13	Regenerative Thermal Oxidizer Ssi 002	Control Device	
S01	Mhi 001 Start-Up Stack	Point of Air Emission	
S02	Mhi 002 Start-Up Stack	Point of Air Emission	
S030	Stacks For Boilers (4 Total)	Point of Air Emission	
S10	Belt Filter Press Room Scrubber Stack	Point of Air Emission	
S111	Incinerator 1 Emergency Bypass Stack	Point of Air Emission	
S112	Incinerator 2 Emergency Bypass Stack	Point of Air Emission	
S12	Ssi 001 And 002 Stack	Point of Air Emission	
S15	Sludge Holding Tanks & Bldg B-4 Scrubber Stack	Point of Air Emission	
Z50	Wastewater Emissions	Point of Air Emission	
FML04	Natural Gas	Fuel Material Location	
<u> </u>			

	•
	•
	•

Section	on 4 - Sourc	ce Gro	oup (Optional)			
4.1	Source Group	p Defii	nition			
!	Define groups of source(s) that are subject to one or more applicable requirements that apply to all source(s) in the group. For renewals, only list source groups not included in the current Title V Operating Permit. If there are no changes, check the box to the right.					
	Group No.			Source ID (for source(s) in this	s group)	
GROL	JP#1		001, 002			
INCIN	ERATORS		001, 002			
OPER	ATOR TRAIN	NING	001, 002			
1	 4.2 Applicable Requirements for Source Groups For renewals, only list group level requirements not included in the current Title V Operating Permit. If there are no changes, check the box to the right. Describe and cite all applicable requirements pertaining to all source groups. No changes from current Title V Operating Permit. Departing Permit. Describe and cite all applicable requirements pertaining to all source groups. Note: A Method of Compliance Worksheet (Addendum 1) must be completed for each requirement listed. 					
Gro	oup No.		Citation No.	Citation Limitation	Limitation Used	

Section 5 - Combustion Operational Inventory

(Complete this section for each combustion source in this site. Duplicate this section as needed).

For renewals, review and correct any pre-printed information and add additional sections for any new combustion unit listed in Section 3 of this application.					
5.1	General Source Information				
a. I	Unit ID: 030	b. Company D	esignation: B-2	2 & B-3 BOILERS (4 TOTAL)
c. I	Plan Approval or Operating Permit No.:				
d. I	Manufacturer: VARIOUS	e. Model No.:			
f.	Source Description: Combustion Unit				
g. I	Rated Heat Input/Throughput:		h. Installation	n Date: 01/01/1976	
_	Exhaust Temperature Units	j. Exhaust % Moisture —		Exhaust Flow √olume: 	SCFM
5.2	CAM Information				
Yes	No ⊠ Emissions unit uses a contro	I device to achiev	e compliance wit	th emissions limitations or st	andards
	Potential precontrol emission		•		
(Add	lendum 3 must be completed if both box	es are checked "Y	es")		

5.3 Exhaust System Components

Explain how the exhaust components are configured:

From Unit	Unit Description	To Unit	Unit Description	Percent Flow
030	Combustion Unit	S030	Point of Air Emission	100
		1	<u> </u>	

5.4 Source Classification Code (SCC) Listing for Standard Operation							
Fuel/Material	Associated SCC	Max Throughput Rate	Firing Sequence				
Natural Gas							

5.5 Maximum Fuel Physical Characteristics

If taking limitations on Fuel Physical Characteristics, see instructions.

SCC/Fuel Burned	FML*	% Sulfur	% Ash	BTU Content (Units)

^{*}FML = Fuel Material Location

5.6 Limitations on Source Operation

Complete this section if you are requesting a limitation on operational hours and/or a permit limitation on the throughput rate equal to or lower than that stated in Section 5.1 of the application.

Maximum amount of hours of source operation per year:

	1	1	1	1		
Fuel/SCC	Hours/Day	Days/Week	Days/Year	Hours/Year	Max Thruput	Units/Time

5.7 Source Applicable Requirements

Describe and ci	Describe and cite all applicable requirements pertaining to this source.						
Note: A Method	d of Compliance Worksheet	(Addendum 1) must be completed for eac	ch requirement listed.				
	only list source level requirent Operating Permit. If there are		hanges from current Title V ating Permit.				
Fuel/SCC	Citation No.	Citation Limitation	Limitation Used				

2700-PM-AQ0010 8/2009 **Section 5 - Combustion Operational Inventory** (Complete this section for each combustion source in this site. Duplicate this section as needed). For renewals, review and correct any pre-printed information and add additional sections for any new combustion unit listed in Section 3 of this application. **General Source Information** Company Designation: Unit ID: a. Plan Approval or Operating Permit No.: Manufacturer: Model No.: f. Source Description: Rated Heat Input/Throughput: h. Installation Date: g. Exhaust k.Exhaust Flow j. Exhaust % Moisture SCFM Temperature Units Volume: 5.2 **CAM Information** Yes Nο \Box Emissions unit uses a control device to achieve compliance with emissions limitations or standards.

Potential precontrol emissions of applicable pollutant are at least 100 percent of the major source amount.

5.3 **Exhaust System Components**

Explain how the exhaust components are configured:

(Addendum 3 must be completed if both boxes are checked "Yes")

From Unit	Unit Description	To Unit	Unit Description	Percent Flow

5.4 Source Classification Code (SCC) Listing for Standard Operation							
Fuel/Material	Associated SCC	Max Throughput Rate	Firing Sequence				

5.5 Maximum Fuel Physical Characteristics

If taking limitations on Fuel Physical Characteristics, see instructions.

SCC/Fuel Burned	FML*	% Sulfur	% Ash	BTU Content (Units)

^{*}FML = Fuel Material Location

5.6 Limitations on Source Operation

Complete this section if you are requesting a limitation on operational hours and/or a permit limitation on the throughput rate equal to or lower than that stated in Section 5.1 of the application.

Maximum amount of hours of source operation per year:

	1	1	1	1		
Fuel/SCC	Hours/Day	Days/Week	Days/Year	Hours/Year	Max Thruput	Units/Time

5.7	Source Applicable Requirements							
	Describe and cite all applicable requirements pertaining to this source.							
	Note: A Method of Compliance Worksheet (Addendum 1) must be completed for each requirement listed.							
	For renewals, only list source level requirements not included in the current Title V Operating Permit. If there are no changes, check the box to the right. No changes from current Title Operating Permit. Operating Permit.							
	Fuel/SCC	Citation No.	Citation Limitation	Limitation Used				

Section 6 - Incinerator Operational Inventory					
(Complete this section for each incinerator at the site. Duplicate this section as needed).					
	For renewals, review and correct any pre-printed information and add additional sections for any new incinerator listed in Section 3 of this application.				
6.1	General Source Information				
a.	Unit ID: 001 b. Company Designation: SEWAGE SLUDGE INCINERATOR 1				
C.	Plan Approval or Operating Permit No.:				
d.	Manufacturer: NICHOLS- e. Model No.: 22'3'O.D. X 8 HEARTH HERRESHOFF				
f.	Source Description: Incinerator				
g.	Rated Heat Input/Throughput: h. Installation Date: 10/01/1977				
i.	Exhaust j. Exhaust k. Exhaust Flow Temperature 105 Units deg F % Moisture 10 Volume: 10,131 SCFM				
l.	Incin. Capacity: 4000 Lbs/Hr m. Primary Burner Heat Input: Units				
n.	Exhaust % CO ₂ : 6 o. Secondary Burner Heat Input: Units				
p.	Incinerator Class: VI: Crematory, Pathological Incinerator				
q.	Waste Type: Sludge: Sewage Sludge Only r. Waste BTU/Lb: 1915				
6.2 CAM Information					
Yes					

(Addendum 3 must be completed if both boxes are checked "Yes")

6.3 Exhaust System Components

Explain how the exhaust components are configured:

From Unit	Unit Description	To Unit	Unit Description	Percent Flow
001	Incinerator	S111	Point of Air Emission	50
001	Incinerator	C06	Control Device	50
C06	Control Device	S01	Point of Air Emission	25
C06	Control Device	C10	Control Device	25
C10	Control Device	C12	Control Device	100
C12	Control Device	S12	Point of Air Emission	100

6.4 Source Classification Code (SCC) Listing for Standard Operation

Fuel / Material	Associated SCC	Max Throughput Rate	Firing Sequence
	5-01-005-06	4,000.00 Lbs/hr	

6.5 Maximum Fuel Physical Characteristics

If taking limitations on Fuel Physical Characteristics, see instructions.

Maximum amount of hours of source operation per year:

SCC/Fuel Burned	FML*	% Sulfur	% Ash	BTU Content (Units)

^{*}FML = Fuel Material Location

6.6 Limitations on Source Operation

Complete this section if you are requesting a limitation on operational hours and/or a permit limitation on the throughput rate equal to or lower than that stated in Section 6.3 of this application.

Maximum amount of hours of source operation per year:

Fuel/Waste	Hours/Day	Days/Week	Days/Year	Hours/Year	Max Thruput	Units/Time

6.7	Source Applicable Requirements								
	Describe and cite all applicable requirements pertaining to this source.								
	Note: A Method of Compliance Worksheet (Addendum 1) must be completed for each requirement listed.								
	For renewals, only list source level requirements not included in the current Title V Operating Permit. If there are no changes, check the box to the right.								
ı	Fuel/Waste	Citation No.	Citation Limitation	Limitation Used					

Sec	ction 6 - Incinerator Operational Inventory					
(Co	mplete this section for each incinerator at the site. Duplicate this section as needed).					
	For renewals, review and correct any pre-printed information and add additional sections for any new incinerator listed in Section 3 of this application.					
6.1	General Source Information					
a.	Unit ID: 002 b. Company Designation: SEWAGE SLUDGE INCINERATOR 2					
C.	Plan Approval or Operating Permit No.:					
d.	Manufacturer: NICHOLS- e. Model No.: 22;3'O.D. X 8 HEARTH HERRESHOFF					
f.	Source Description: Incinerator					
g.	Rated Heat Input/Throughput: h. Installation Date: 10/01/1977					
i.	Exhaust j. Exhaust k. Exhaust Flow Temperature 105 Units deg F % Moisture 9 Volume: 10,244 SCFM					
l.	Incin. Capacity: 4000 Lbs/Hr m. Primary Burner Heat Input: Units					
n.	Exhaust % CO ₂ : 6 o. Secondary Burner Heat Input: Units					
p.	Incinerator Class: VI: Crematory, Pathological Incinerator					
q.	Waste Type: Sludge: Sewage Sludge Only r. Waste BTU/Lb: 1915					
6.2	CAM Information					
Yes						

(Addendum 3 must be completed if both boxes are checked "Yes")

6.3 Exhaust System Components

Explain how the exhaust components are configured:

From Unit	Unit Description	To Unit	Unit Description	Percent Flow
002	Incinerator	S112	Point of Air Emission	50
002	Incinerator	C07	Control Device	50
C07	Control Device	S02	Point of Air Emission	25
C07	Control Device	C11	Control Device	25
C11	Control Device	C13	Control Device	100
C13	Control Device	S12	Point of Air Emission	100

6.4 Source Classification Code (SCC) Listing for Standard Operation

	1	1	
Fuel / Material	Associated SCC	Max Throughput Rate	Firing Sequence
	5-01-005-06	4,000.00 Lbs/hr	

6.5 Maximum Fuel Physical Characteristics

If taking limitations on Fuel Physical Characteristics, see instructions.

SCC/Fuel Burned	FML*	% Sulfur	% Ash	BTU Content (Units)

^{*}FML = Fuel Material Location

6.6 Limitations on Source Operation

Complete this section if you are requesting a limitation on operational hours and/or a permit limitation on the throughput rate equal to or lower than that stated in Section 6.3 of this application.

Fuel/Waste	Hours/Day	Days/Week	Days/Year	Hours/Year	Max Thruput	Units/Time

6.7	Source Applic	able Requirements						
	Describe and c	ite all applicable requirement	s pertaining to this source.					
	Note: A Method of Compliance Worksheet (Addendum 1) must be completed for each requirement listed.							
	For renewals, only list source level requirements not included in the current Title V Operating Permit. If there are no changes, check the box to the right.							
ı	Fuel/Waste Citation No. Citation Limitation Limitation Used							

Section 6 - Incinerator Operational Inventory						
(Complete this section for each incinerator at the site. Duplicate this section as needed).						
For renewals, review and correct any pre-printed information and add additional sections for any new incinerator listed in Section 3 of this application.						
6.1 General Source Information						
a. Unit ID: b. Company Designation:						
c. Plan Approval or Operating Permit No.:						
d. Manufacturer: e. Model No.:						
Source Description:						
g. Rated Heat Input/Throughput: h. Installation Date:						
. Exhaust j. Exhaust k. Exhaust Flow Volume: SCFM						
. Incin. Capacity: Lbs/Hr m. Primary Burner Heat Input: Units						
n. Exhaust % CO ₂ : o. Secondary Burner Heat Input: Units						
o. Incinerator Class:						
q. Waste Type: r. Waste BTU/Lb:						
6.2 CAM Information						
 ✓ Emissions unit uses a control device to achieve compliance with emissions limitations or standards. ✓ Potential precontrol emissions of applicable pollutant are at least 100 percent of the major source amount. 						
Addendum 3 must be completed if both boxes are checked "Ves")						

	Exhaust System C Explain how the ex		are configured:			
	From Unit L	Init Description	To Unit	:	Unit Description	Percent Flow
		-			-	
4	Source Classificat	ion Code (SCC) L	isting for Stand	ard Operat	ion	
	Fuel / Material	Associ	ated SCC	Max Th	x Throughput Rate Firing Sequ	
_						
5	Maximum Fuel Ph	ysical Characteris	stics			
	If taking limitations	on Fuel Physical C	characteristics, se	e instruction	ıs.	
	ii taking iiinitations					
		of hours of source (operation per vea	ır.		
	Maximum amount o	of hours of source of	operation per yea	nr: 		
		f hours of source of	operation per yea		% Ash	BTU Content (Units
	Maximum amount o				% Ash	BTU Content (Units
	Maximum amount o				% Ash	BTU Content (Units
	Maximum amount o				% Ash	BTU Content (Units

^{*}FML = Fuel Material Location

6.6 Limitations on Source Operation

Complete this section if you are requesting a limitation on operational hours and/or a permit limitation on the throughput rate equal to or lower than that stated in Section 6.3 of this application.

Fuel/Waste	Hours/Day	Days/Week	Days/Year	Hours/Year	Max Thruput	Units/Time

6.7	Source Applic	able Requirements							
	Describe and c	ite all applicable requirement	ts pertaining to this source.						
	Note: A Metho	d of Compliance Worksheet	(Addendum 1) must be completed for eac	h requirement listed.					
	For renewals, only list source level requirements not included in the current Title V Operating Permit. If there are no changes, check the box to the right.								
ı	Fuel/Waste	Citation No.	Citation Limitation	Limitation Used					

Section 7 - Process Operational Inventory

(Complete this section for each process at this site. Duplicate this section as needed).

	For renewals, review and correct any pre-printed information and add additional sections for any n Section 3 of this application.	ew process listed in
7.1	7.1 General Source Information	
a.	a. Unit ID: 110 b. Company Designation: WASTEWATER TREATM	ENT PROCESS
C.	c. Plan Approval or Operating Permit Number:	
d.	d. Manufacturer: e. Model Number:	
f.	Source Description: Process	
g.	g. Rated Heat Input/Throughput: h. Installation Date: 01/01/1	977
i.	Exhaust j. Exhaust k. Exhaust Flow Temperature Units % Moisture Volume:	SCFM
7.2	7.2 CAM Information	
Yes		
	Potential precontrol emissions of applicable pollutant are at least 100 percent of the	najor source amount.
(Ac	Addendum 3 must be completed if both are checked "Yes")	

7.3 Exhaust System Components

Explain how the exhaust components are configured:

From Unit	Unit Description	To Unit	Unit Description	Percent Flow
110	Process	Z50	Point of Air Emission	100

7.4	Source Classification Code (SCC) Listing for Standard Operation	

	-	-	
Fuel/Material	Associated SCC	Max Throughput Rate	Firing Sequence
WASTEWATER	3-99-999-95	1,800.00 M Gal/hr	

7.5 Maximum Fuel Physical Characteristics

If taking limitations on Fuel Physical Characteristics, see instructions.

SCC/Fuel Burned	FML	% Sulfur	% Ash	BTU Content (Units)

^{*}FML = Fuel Material Location

7.6 Limitations on Source Operation

Complete this section if you are requesting a limitation on operational hours and/or a permit limitation on the throughput rate equal to or lower than that stated in Section 7.3 of this application.

Fuel	Hours/Day	Days/Week	Days/Year	Hours/Year	Max Throughput	Units/Time

7.7	Source Applicable Requirements							
	Describe a	nd cite all applicable requirement	s pertaining to th	nis source.				
	Note: A Method of Compliance Worksheet (Addendum 1) must be completed for each requirement listed.							
		als, only list source level requirem e V Operating Permit. If there are right.			changes from current Title V erating Permit.			
F	uel/Product	Citation Number	Citati	on Limitation	Limitation Used			
7.8	Raw Mate	ials						
	List all of t regulate er	ne raw materials used in this pronissions.	ocess to the exte	ent that this information is	s needed to determine or			
7.9	7.9 Processing Steps To the extent that this information is needed to determine or regulate emissions, list all of the processing steps and raw materials for each step utilized to complete the material or product.							
	Step	Description		Raw	Materials			

7.10	Request for Confidentiality						
	Do you request that the information on this page be considered kept confidential?						
	☐ Yes						
	If yes, include a justification for confidentiality that meets the requirement of 25 Pa. Code § 127.411(d).						
_							
_							

Section 7 - Process Operational Inventory

(Complete this section for each process at this site. Duplicate this section as needed).

	r renewals, review and correct any pre-printed information and add additional sections for any new process listed in action 3 of this application.
7.1	General Source Information
a.	Unit ID: 111 b. Company Designation: 4-250,000 GAL SLUDGE HOLDING TANKS
C.	Plan Approval or Operating Permit Number:
d.	Manufacturer: e. Model Number:
f.	Source Description: Process
g.	Rated Heat Input/Throughput: h. Installation Date:
i.	Exhaust j. Exhaust k. Exhaust Flow Volume: SCFM
7.2	2 CAM Information
Ye	
	· ·
(Ac	ddendum 3 must be completed if both are checked "Yes")

7.3 Exhaust System Components

Explain how the exhaust components are configured:

From Unit	Unit Description	To Unit	Unit Description	Percent Flow
111	Process	C05	Control Device	100
C05	Control Device	S15	Point of Air Emission	100

7.4 Source Classification Code (SCC) Listing for Standard Operation								
Fuel/Material	Associated SCC	Max Throughput Rate	Firing Sequence					
WASTEWATER	3-99-999-95	N/A						

7.5 Maximum Fuel Physical Characteristics

If taking limitations on Fuel Physical Characteristics, see instructions.

SCC/Fuel Burned	FML	% Sulfur	% Ash	BTU Content (Units)

^{*}FML = Fuel Material Location

7.6 Limitations on Source Operation

Complete this section if you are requesting a limitation on operational hours and/or a permit limitation on the throughput rate equal to or lower than that stated in Section 7.3 of this application.

Fuel	Hours/Day	Days/Week	Days/Year	Hours/Year	Max Throughput	Units/Time

7.7	Source Applicable Requirements						
	Describe a	nd cite all applicable requirement	s pertaining to th	nis source.			
	Note: A M	ethod of Compliance Worksheet	(Addendum 1) m	ust be completed for eac	h requirement listed.		
		als, only list source level requirem e V Operating Permit. If there and right.			changes from current Title V erating Permit.		
F	uel/Product	Citation Number	Citati	on Limitation	Limitation Used		
7.8	Raw Mater	rials					
	List all of t regulate er	he raw materials used in this pronissions.	ocess to the exte	ent that this information is	s needed to determine or		
7.9	7.9 Processing Steps To the extent that this information is needed to determine or regulate emissions, list all of the processing steps and raw materials for each step utilized to complete the material or product.						
	Step	Description		Raw	Materials		

7.10	Request for Confidentiality					
	Do you request that the information on this page be considered kept confidential?					
	□ Vaa					
	☐ Yes No					
	If yes, include a justification for confidentiality that meets the requirement of 25 Pa. Code § 127.411(d).					
_						

Section 7 - Pi	rocess Operatio	nal Invent	ory						
(Complete this se	ection for each proce	ess at this sit	e. Duplicate thi	s section as ı	needed).				
For renewals, rev Section 3 of this	view and correct any application.	pre-printed	information and	add addition	al sections for any	/ new pr	ocess listed in		
7.1 General Se	ource Information								
a. Unit ID:		b. Cor	npany Designat	ion:					
c. Plan Approva	al or Operating Perm	nit Number:							
d. Manufacture	r:		e. Model N	lumber:					
f. Source Desc	ription:								
g. Rated Heat I	nput/Throughput:			h. Installa	ation Date:				
Exhaust i. Temperature	Units	j. deg F	Exhaust % Moisture	k.	Exhaust Flow Volume:		SCFM		
Pot	issions unit uses a c ential precontrol emi ust be completed if b	ssions of ap	plicable pollutar	•					
7.3 Exhaust System Components Explain how the exhaust components are configured:									
From Unit	Unit Descri	ption	To Unit		Unit Description		Percent Flow		
						ll l			

7.4	4 Source Classification Code (SCC) Listing for Standard Operation									
	Fuel/Material	Associated SCC	Max Throughput Rate	Firing Sequence						

7.5 Maximum Fuel Physical Characteristics

If taking limitations on Fuel Physical Characteristics, see instructions.

SCC/Fuel Burned	FML	% Sulfur	% Ash	BTU Content (Units)

^{*}FML = Fuel Material Location

7.6 Limitations on Source Operation

Complete this section if you are requesting a limitation on operational hours and/or a permit limitation on the throughput rate equal to or lower than that stated in Section 7.3 of this application.

Fuel	Hours/Day	Days/Week	Days/Year	Hours/Year	Max Throughput	Units/Time

7.7	7 Source Applicable Requirements							
	Describe and cite all applicable requirements pertaining to this source.							
	Note: A Method of Compliance Worksheet (Addendum 1) must be completed for each requirement listed.							
		als, only list source level requiren le V Operating Permit. If there ar right.			changes from current Title V erating Permit.			
F	uel/Produc	t Citation Number	Citati	on Limitation	Limitation Used			
7.8	List all of the raw materials used in this process to the extent that this information is needed to determine or regulate emissions.							
7.9	7.9 Processing Steps To the extent that this information is needed to determine or regulate emissions, list all of the processing steps and raw materials for each step utilized to complete the material or product.							
	Step	Description		Raw	Materials			

7.10	Request for Confidentiality						
	Do you request that the information on this page be considered kept confidential?						
	☐ Yes ☐ No						
	If yes, include a justification for confidentiality that meets the requirement of 25 Pa. Code § 127.411(d).						
_							
_							
_							

Section 8 - Control Device Information (duplicate this section as needed)

For renewals, review and correct any pre-printed information and add additional sections for any new control device

	ed in Section 3 of this application.	eu IIII	ioimation and add additio	nai sections for any new control device
8.1	General Control Device Information			
a.	Unit ID: C04	b.	Company Designation:	BELT FILTER PRESS ROOM PROCESS SCRUBBER
C.	Used by Source(s):			
d.	Type: Packed Tower Scrubber			
e.	Pressure Drop in H ₂ 0: 6		f. Capture Efficiency:	
g.	Scrubber Flow Rate (GPM): 150			
h.	Manufacturer: DUALL		i. Model No.: I	PT-513-72S
j.	Installation Date:			

Pollutant Name	CAS No.	Estimate Control Efficiency	Basis for Efficiency Estimate

h. Manufacturer:

Installation Date:

j.

Section 8 - Control Device Information (duplicate this section as needed)

i. Model No.:

	r renewals, review and correct any pre-printed ed in Section 3 of this application.	ed inf	formation and add addition	al sections for any new control device
8.1	General Control Device Information			
a.	Unit ID: C05	b.	Company Designation:	SLUDGE HOLDING TANKS & BLDG B-4 SCRUBBER
C.	Used by Source(s): 111			
d.	Type: Packed Tower Absorber			
e.	Pressure Drop in H ₂ 0: 4		f. Capture Efficiency:	99
g.	Scrubber Flow Rate (GPM): 46			

Pollutant Name	CAS No.	Estimate Control Efficiency	Basis for Efficiency Estimate
Hydrogen Sulfide	A286	99 %	Rated efficiency: guaranteed minimum

Installation Date:

Section 8 - Control Device Information (duplicate this section as needed)

	For renewals, review and correct any pre-printed information and add additional sections for any new control device listed in Section 3 of this application.					
8.1	8.1 General Control Device Information					
a.	Unit ID: C06		b.	Company Designation:	QUENCH & MULTI-VENTURI SCRUBBER SSI 001	
C.	Used by Source(s):	001				
d.	Type: Venturi So	crubber				

g.	Scrubber Flow Rate (GPM):		
h.	Manufacturer:	i.	Model No.:

e. Pressure Drop in H₂0: _____ f. Capture Efficiency: ____

		_		
Pollutant Name	CAS No.	Estimate Control Efficiency	Basis for Efficiency Estimate	
Particulate Matter < 10 Microns	PM10	98.7 %	Est Eff (eff. based on estimates)	

Section 8 - Control Device Information (duplicate this section as needed)

0.4	Consul Control Posice Information
listed i	in Section 3 of this application.
For re	enewals, review and correct any pre-printed information and add additional sections for any new control device

liot	isted in Section 5 of this application.					
8.1	General Control Device Information					
a.	Unit ID: C07	b.	Company Designation:	QUENCH & MULTI-VENTURI SCRUBBER SSI 002		
C.	Used by Source(s): 002					
d.	Type: Venturi Scrubber					
e.	Pressure Drop in H ₂ 0:		f. Capture Efficiency:			
g.	g. Scrubber Flow Rate (GPM):					
h.	Manufacturer:		i. Model No.:			
j.	Installation Date:					

Pollutant Name	CAS No.	Estimate Control Efficiency	Basis for Efficiency Estimate		
Particulate Matter < 10 Microns	PM10	98.7 %	Est Eff (eff. based on estimates)		

h.

j.

Manufacturer:

Installation Date:

Section 8 - Control Device Information (duplicate this section as needed)

For renewals, review and correct any pre-printed information and add additional sections for any new control device listed in Section 3 of this application. 8.1 General Control Device Information WET ELECTROSTATIC a. Unit ID: C10 Company Designation: PRECIPITATOR SSI 001 Used by C06 Source(s): Type: Single Stage Electrostatic Precipitator Pressure Drop in H₂0: f. Capture Efficiency: e. Scrubber Flow Rate (GPM): g.

Model No.:

Pollutant Name	CAS No.	Estimate Control Efficiency	Basis for Efficiency Estimate		
Particulate Matter < 10					
Microns	PM10	99 %	Other; see comments		

j.

Installation Date:

Section 8 - Control Device Information (duplicate this section as needed)

For renewals, review and correct any pre-printed information and add additional sections for any new control device listed in Section 3 of this application. 8.1 General Control Device Information WET ELECTROSTATIC a. Unit ID: C11 Company Designation: PRECIPITATOR SSI 002 Used by Source(s): C07 Type: Single Stage Electrostatic Precipitator Pressure Drop in H₂0: f. Capture Efficiency: e. Scrubber Flow Rate (GPM): Model No.: h. Manufacturer:

Pollutant Name	CAS No.	Estimate Control Efficiency	Basis for Efficiency Estimate		
Particulate Matter < 10 Microns	PM10	99 %	Other; see comments		

Manufacturer:

Installation Date:

h.

j.

Section 8 - Control Device Information (duplicate this section as needed)

i. Model No.:

	For renewals, review and correct any pre-printed information and add additional sections for any new control device isted in Section 3 of this application.							
8.1	8.1 General Control Device Information							
a.	Unit ID: C12		b.	Company Designation:	REGENERATIVE THERMAL OXIDIZER SSI 001			
C.	Used by Source(s):	C10, FML04						
d.	d. Type: Direct Flame Incin. with heat exchange							
e.	Pressure Drop in H	20:		f. Capture Efficiency:				

8.2 Control Device Efficiencies for this Control Device:

Scrubber Flow Rate (GPM):

Pollutant Name	CAS No.	Estimate Control Efficiency	Basis for Efficiency Estimate
Volatile Organic Compounds	voc	99 %	Est Eff (eff. based on estimates)
Methane	A303	99 %	No data available - VOC value used

Section 8 - Control Device Information (duplicate this section as needed)

For renewals, review and correct any pre-printed information and add additional sections for any new control devices in Section 3 of this application.					
8.1	General Control Device Information				

a.	Unit ID: C13		b.	Company Designation:	REGENERATIVE THERMAL OXIDIZER SSI 002
C.	Used by Source(s):	C11, FML04			
d.	Type: Direct Flar	ne Incin. with heat excl	nange	9	
e.	Pressure Drop in H	20:		f. Capture Efficiency:	
g.	Scrubber Flow Rate	e (GPM):			
h.	Manufacturer:			i. Model No.:	
j.	Installation Date:				

Pollutant Name	CAS No.	Estimate Control Efficiency	Basis for Efficiency Estimate		
Volatile Organic Compounds	voc	99 %	Est Eff (eff. based on estimates)		
Methane	A303	99 %	No data available - VOC value used		

h.

Manufacturer:

Section 8 - Control Device Information (duplicate this section as needed) For renewals, review and correct any pre-printed information and add additional sections for any new control device listed in Section 3 of this application. 8.1 General Control Device Information a. Unit ID: _______ b. Company Designation: _______ Used by c. Source(s): _______ d. Type: _______ e. Pressure Drop in H₂0: ______ f. Capture Efficiency: _______ g. Scrubber Flow Rate (GPM):

Model No.:

i.

| Basis for Efficiency | Basis for Efficiency | Estimate Control | Estimate |

Section 9 - Stack/Flue Information (duplicate this section as needed)

For renewals, review and correct any pre-printed information and add additional sections for any new stack/flue listed in

Sec	ction 3 of this application.							
9.1	General Stack/Vent Information							
a.	Unit ID: S01 b. Company Designation: MHI 001 START-UP STACK							
C.	Discharge Type: VERTICAL: UNOBSTRUCTED OPENING							
d.	Diameter (ft): 3.5 Height (ft): 104 Base Elevation (ft): 12							
e.	Exhaust Temperature: 105 deg F Exhaust % Moisture: 9 Exhaust Velocity (m/Sec): 7.34							
f.	Exhaust Volume:13,899 ACFM							
g.	Distance to Nearest Property Line (ft):							
h.	Weather Cap?: ☐ Yes ☐ No							
i.	Used by Sources: C06							
j.	Latitude: 39° 49 43.0251 Longitude: -75° 23 35.1784 Horizontal Reference Datum: North American Datum of 1983							
Geographic coordinate determination method based on GPS code measurem Horizontal Collection Method: (pseudo range) differential (DGPS) Reference Point: Plant entrance (general) - The general entrance to a plant								
a.	Unit ID: S02 b. Company Designation: MHI 002 START-UP STACK							
c.	Discharge Type: VERTICAL: UNOBSTRUCTED OPENING							
d.	Diameter (ft): 3.5 Height (ft): 104 Base Elevation (ft): 12							
e.	Exhaust Temperature: 105 deg F Exhaust % Moisture: 9 Exhaust Velocity (m/Sec): 7.34							
f.	Exhaust Volume: 13,899 ACFM Exhaust Volume: 11,865 SCFM							
g.	Distance to Nearest Property Line (ft):							
٦.	Weather Cap?: ☐ Yes ☐ No							
	Used by Sources: C07							
j.	Latitude: 39° 49 43.0251 Longitude: -75° 23 35.1784 Horizontal Reference Datum: North American Datum of 1983							
	Geographic coordinate determination method based on GPS code measurements Horizontal Collection Method: (pseudo range) differential (DGPS) Reference Point: Plant entrance (general) - The general entrance to a plant							

i.

j.

Section 9 - Stack/Flue Information (duplicate this section as needed) For renewals, review and correct any pre-printed information and add additional sections for any new stack/flue listed in Section 3 of this application. 9.1 General Stack/Vent Information a. Unit ID: S030 b. Company Designation: STACKS FOR BOILERS (4 TOTAL) c. Discharge Type: d. Diameter (ft): _____ Height (ft): _____ Base Elevation (ft): _____ e. Exhaust Temperature: 300 deg F Exhaust % Moisture: 10 Exhaust Velocity : Exhaust Volume: 400 ACFM f. Exhaust Volume: 251 SCFM Distance to Nearest Property Line (ft): Yes ⊠ No h. Weather Cap?: i. Used by Sources: 030 Latitude: 39° 49 31.89 Longitude: -75° 23 38.37 Horizontal Reference Datum: Horizontal Collection Method: Reference Point: a. Unit ID: S10 b. Company Designation: BELT FILTER PRESS ROOM SCRUBBER STACK Discharge Type: Diameter (ft): 6 Height (ft): 24 Base Elevation (ft): 17 e. Exhaust Temperature: 70 deg F Exhaust % Moisture: 30 Exhaust Velocity (m/Sec): 3.08 f. g. h.

Exhaust Volume: 17,143		ACFM		Exhau	ust Volume:	12,000	SCFM
Distance to Nearest	t Property Li	ne (ft):					
Weather Cap?:	☐ Ye	5	⊠ No				
Used by Sources:	C04						
Latitude: 39° 49	43.0251			Longitude:	-75° 23 35.1	784	
Horizontal Reference Datum:		North Ame	rican Datum o	of 1983			
Horizontal Collectio	Geographic coordinate determination method based on GPS code measurements (pseudo range) differential (DGPS)						
Reference Point:	Plant entra	nce (general) - The gener	al entrance to a	a plant		
_							

Reference Point:

Section 9 - Stack/Flue Information (duplicate this section as needed) For renewals, review and correct any pre-printed information and add additional sections for any new stack/flue listed in Section 3 of this application. 9.1 General Stack/Vent Information a. Unit ID: S111 b. Company Designation: INCINERATOR 1 EMERGENCY BYPASS STACK c. Discharge Type: d. Diameter (ft): _____ Height (ft): _____ Base Elevation (ft): _____ e. Exhaust Temperature: 70 deg F Exhaust % Moisture: 10 Exhaust Velocity : Exhaust Volume: 333 ACFM f. Exhaust Volume: 300 SCFM g. Distance to Nearest Property Line (ft): h. Weather Cap?: ⊠ No i. Used by Sources: 001 j. Latitude: 39° 49 43.0251 Longitude: -75° 23 35.1784 Horizontal Reference Datum: Horizontal Collection Method: Reference Point: a. Unit ID: S112 b. Company Designation: INCINERATOR 2 EMERGENCY BYPASS STACK c. Discharge Type: d. Diameter (ft): _____ Height (ft): _____ Base Elevation (ft): _____ e. Exhaust Temperature: 70 deg F Exhaust % Moisture: 10 Exhaust Velocity : Exhaust Volume: 270 SCFM Exhaust Volume: 300 ACFM f. g. Distance to Nearest Property Line (ft): h. Weather Cap?: ⊠ No Used by Sources: 002 Longitude: -75° 23 35.1784 Latitude: 39° 49 43.0251 Horizontal Reference Datum: Horizontal Collection Method:

Section 9 - Stack/Flue Information (duplicate this section as needed) For renewals, review and correct any pre-printed information and add additional sections for any new stack/flue listed in Section 3 of this application. 9.1 General Stack/Vent Information a. Unit ID: S12 b. Company Designation: SSI 001 AND 002 STACK c. Discharge Type: VERTICAL: WEATHER CAP/SIMILAR OBSTRUCTIN d. Diameter (ft): 4 Height (ft): 65 Base Elevation (ft): 75 e. Exhaust Temperature: 300 deg F Exhaust % Moisture: 4 Exhaust Velocity (m/Sec): 8.81 Exhaust Volume: 21,800 ACFM f. Exhaust Volume: 14,595 SCFM g. Distance to Nearest Property Line (ft):

Weather Cap?: ☐ Yes ☐ No
Used by Sources: C12, C13
Latitude: 39° 49 31.89 Longitude: -75° 23 38.37
Horizontal Reference Datum:
Horizontal Collection Method:
Reference Point:
Unit ID: S15 b. Company Designation: SLUDGE HOLDING TANKS & BLDG B-4 SCRUBBER STACK
Discharge Type: VERTICAL: UNOBSTRUCTED OPENING
Diameter (ft): 4 Height (ft): 50 Base Elevation (ft): 13
Exhaust Temperature:70 deg F Exhaust % Moisture:80 Exhaust Velocity (m/Sec):4.65
Exhaust Volume: 11,500 ACFM Exhaust Volume: 2,300 SCFM
Distance to Nearest Property Line (ft):
Weather Cap?: ☐ Yes ☐ No
Used by Sources: C05
Latitude: 39° 49 31.89 Longitude: -75° 23 38.37
Horizontal Reference Datum:
Horizontal Collection Method:
Reference Point:

Section 9 - Stack/Flue Information (duplicate this section as needed)

For renewals, review and correct any pre-printed information and add additional sections for any new stack/flue listed in

Sec	ction 3 of this application.
9.1	General Stack/Vent Information
a.	Unit ID: Z50 b. Company Designation: WASTEWATER EMISSIONS
C.	Discharge Type: FUGITIVE EMISSIONS
d.	Diameter (ft): Height (ft): Base Elevation (ft):
e.	Exhaust Temperature: 68 deg F Exhaust % Moisture: 50 Exhaust Velocity :
f.	Exhaust Volume:1 ACFM Exhaust Volume:1 SCFM
g.	Distance to Nearest Property Line (ft):
h.	Weather Cap?: ☐ Yes ☐ No
i.	Used by Sources: 110
j.	Latitude: 39° 49 43.0251 Longitude: -75° 23 35.1784 Horizontal Reference Datum: North American Datum of 1983 Geographic coordinate determination method based on GPS code measurements (pseudo range) differential (DGPS) Reference Point: Plant entrance (general) - The general entrance to a plant
	Unit ID: b. Company Designation:
	Discharge Type:
	Diameter (ft): Height (ft): Base Elevation (ft):
	Exhaust Temperature: Exhaust % Moisture: Exhaust Velocity :
	Exhaust Volume: ACFM Exhaust Volume: SCFM
g.	Distance to Nearest Property Line (ft):
h.	Weather Cap?:
i.	Used by Sources:
j.	Latitude: Longitude: Horizontal Reference Datum: Horizontal Collection Method: Reference Point:

Section 10 - Fuel Material Location (FML) Information (Optional)

For renewals review and correct any pre-printed information and add additional sections for any new FML listed in

FML ID No.:	FML04		b. Name:	NATUR	AL GA	S		
Capacity:		Units:			d.	Fuel:	Natura	al Gas
Maximum Fuel C	haracteristics: I	f fuel is coal,	what is the moi	sture con	tent?			
% Ash _0	% Sulfur:	0	BTU Cont	ent: 985	5		Units:	lbs/gal/cu f
Used by Source:								
001, 002, 030,	C12, C13							
FML ID No.:			b. Name:					
Capacity:		Units:	•		d.	Fuel:		
Maximum Fuel C	haracteristics:	f fuel is coal,	what is the moi	sture con	tent?			
% Ash	% Sulfur:	·	BTU Conto				Units:	
Used by Source:		-					_	-
 FML ID No.:			b. Name:					
		Units:	b. Name:		d.	Fuel:		
Capacity:	haracteristics:	Units:		sture con		Fuel:		
		f fuel is coal,	what is the moi		tent?		Units:	

Section 11 - Compliance Plan for the Facility							
			Yes	No			
11.1	Will your facility be in compliance with all applicable time of permit issuance and continue to comply with during the permit duration?	requirements at the these requirements	\boxtimes				
11.2	Will your facility be in compliance with all applicable req scheduled to take effect during the term of the permit?						
11.3	Will these requirements be met by the regulatory requi	\boxtimes					
	If you checked "No" in Part 11.1, 11.2 or 11.3, answer	the following question	s:				
11.4	Identify applicable requirement(s) for which compliance	e is not or will not be a	achieved:				
	Source ID No.		Citation No.				
11.4.1	Briefly describe how compliance with this/these applica	able requirement(s) wi	ll be achieved:				
_							
_							
_							

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11.4.2.	Provide a detailed schedule of compliance for the noncomplying sources or activities identified in this section of the application. Include an enforceable sequence of corrective actions with milestone and projected compliance dates.						
ĺ	Date	Action/Milestone					
11.4.3.	Indicate the submittal frequency for the progress repor	t (s):					
1.4.4.	Starting date for the submittal of the progress report(s)	:					

Sec	Section 12 – Alternative Operating Scenario (optional)							
Dupl	icate this se	ction for each sou	ırce participated iı	n this altern	ative s	cenario.		
12.1	General Ir	nformation						
a.	Alternative	Operating Scena	ario Name or ID No	o.:				
b.	Source ID	No.:		C.	Soul	rce Name:		
d.	Source Type (check one): Combustion Incinerator Process						cess	
e.	. Give a brief description of this alternative scenario stating how it is different from the standard operation:							
400	•							
	Operationa ck all that ap	al Flexibility Req	uest					
Once	<u>_</u>		vatem component	configuration	- n			
		•	stem component	_				
	If thi	s box is checked,	complete Section	is 12.3 and	12.7			
	☐ Alter	native type of fue	l usage replacing	or in addition	on to a	n existing fuel in	standard operatior	١.
	If thi	s box is checked,	complete Section	ns 12.4 and/	or 12.5	5 and 12.7		
	☐ Altei	native process m	ethod replacing or	r in addition	ı to a p	rocess SCC exist	ing in standard op	eration.
		•	complete Section		•			
40.0	Full access 0							
12.3	Exnaust S	ystem Compone	nts					
Spec	cify the com	plete exhaust sys	tem component co	onfiguration	for this	s alternative oper	ating scenario.	
	From	From	То	То				
	mponent	Component	Component	Compon		Danas et Flass	Dowin Data	First Data
	Туре	Number	Туре	Numbe	er	Percent Flow	Begin Date	End Date

12.4 Source Classification C	2.4 Source Classification Code (SCC) Listing for Alternative Operation							
Give a complete listing of all fuels burned, products produced by a process or waste incinerated for this alternative perating scenario.								
Fuel Associated SCC Max Throughout Rate Firing Sequence								

Fuel	Associated SCC	Max Throughout Rate	Firing Sequence

12.5 Alternative Fuel Physical Characteristics									
Give a complete listing of all fuels physical characteristics for this alternative operating scenario.									
SCC/Fuel Burned	FML	% Sulfur	% Ash	BTU Content (Units)					
	<u>.</u>								
12.6 Alternative Proces	ss/Product Des	cription							
Briefly describe the applicable:	e change(s) in ra	aw materials and/or proce	ss methods used in this	operating scenario, if					

a. Briefly describe the change(s) in raw materials and/or process methods used in this operating scenario, if applicable: b. Provide and briefly describe the process SCC associated with this alternative operating scenario: Process SCC: SCC Description: c. Alternative Product(s):

12.7 Source Potential to Emit

Give Potential Emission estimate for all air pollutants emitted at this source for this operating scenario.

Pollutant or CAS Number	Fuel	Emission/Activity Allowable per Unit	Calc. Method	Max. Capacity	Total Hours	Emission in TPY

Section 13 – Compliance Certification
13.1 Schedule for Compliance Certification Submission
a. Frequency of Submittal: Schedule specified in current Title V
b. Schedule specified in current Title V
Operating Permit or proposed starting date: As required by current permit
13.2 Monitoring Compliance
Is the site identified in this application in compliance with all applicable requirements and compliance certification requirements:
⊠ Yes □ No
If "NO", describe which requirements are not being met:

13.3 Certification of Compliance
Subject to the penalties of Title 18 Pa. C.S. Section 4904 and 35 P.S. Section 4009(b)(2), I certify that I have the authority to submit this Permit Application on behalf of the applicant herein and that based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate, and complete.
(Signed) Date May 5, 2023
Name (Type) Michael DiSantis
Title: Director of Operations and Maintenance
Title. Director of Operations and Maintenance



COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF AIR QUALITY

AIR POLLUTION CONTROL ACT COMPLIANCE REVIEW FORM

Fully and accurately provide the following information, as specified. Attach additional sheets as necessary.						
Type of Compliance Review Form Submittal (check all that apply)						
☐ Original Filing Date of Last Compliance Review Form	ļ					
Type of Submittal						
☐ Extension of Plan Approval ☐ Change of Ownership ☐ Periodic Submission (@ 6 mos)						
Other:						
SECTION A. GENERAL APPLICATION INFORMATION						
Name of Applicant/Permittee/("applicant")						
(non-corporations-attach documentation of legal name) Delaware County Regional Water Quality Control Authority (DELCORA)						
Address PO Box 999, 100 East Fifth Street						
Chester, PA 19016-0999						
Telephone (610) 876-5523 Taxpayer ID# 237182698						
Permit, Plan Approval or Application ID# 23-00038						
Identify the form of management under which the applicant conducts its business (check appropriate box) Individual Syndicate Government Agency						
☐ Municipality ☐ Municipal Authority ☐ Joint Venture						
Proprietorship Fictitious Name Association						
☐ Public Corporation☐ Partnership☐ Other Type of Business, specify below:☐ Private Corporation☐ Limited Partnership						
·						
Describe below the type(s) of business activities performed. The Delaware County Regional Water Quality Control Authority (DELCORA) owns and operates the Western Regional Treatment Plant (WRTP) in Chester City, Delaware County and provides sewer service to Chester City and surrounding municipalities. The DELCORA WRTP uses two (2) multiple hearth incinerators to process the sewage sludge. The incinerators are classified as air contaminant sources and are permitted by DEP under a Title V permit. Other permitted air contamination sources include the wastewater treatment process and sludge holding tanks.						

SECTION B. GENERAL INFORMATION REGARDING "APPLICANT"

If applicant is a corporation or a division or other unit of a corporation, provide the names, principal places of business, state of incorporation, and taxpayer ID numbers of all domestic and foreign parent corporations (including the ultimate parent corporation), and all domestic and foreign subsidiary corporations of the ultimate parent corporation with operations in Pennsylvania. Please include all corporate divisions or units, (whether incorporated or unincorporated) and privately held corporations. (A diagram of corporate relationships may be provided to illustrate corporate relationships.) Attach additional sheets as necessary.

Unit Name	Principal Places of Business	State of Incorporation	Taxpayer ID	Relationship to Applicant
Delaware County Regional Water Quality Control Authority (DELCORA)	PO Box 999 100 East Fifth Street Chester, PA 19013	Pennsylvania	237182698	Owner/Operator

SECTION C. SPECIFIC INFORMATION REGARDING APPLICANT AND ITS "RELATED PARTIES"

Pennsylvania Facilities. List the name and location (mailing address, municipality, county), telephone number, and relationship to applicant (parent, subsidiary or general partner) of applicant and all Related Parties' places of business, and facilities in Pennsylvania. Attach additional sheets as necessary.

Unit Name	Street Address	County and Municipality	Telephone No.	Relationship to Applicant
DELCORA Western Regional Treatment Plant (WRTP)	3201 West Front Street Chester, PA 19013	Delaware County Chester City	(610) 876-5523	Owner/Operator

Provide the names and business addresses of all general partners of the applicant and parent and subsidiary corporations, if any.

Name	Business Address
James R. Kern – Chairman	PO Box 999, 100 East Fifth Street, Chester, PA 19016
Paul Mullen – Secretary	PO Box 999, 100 East Fifth Street, Chester, PA 19016
Kenneth Schuster – Board Member	PO Box 999, 100 East Fifth Street, Chester, PA 19016
William Martin – Board Member	PO Box 999, 100 East Fifth Street, Chester, PA 19016
James J. Knapp – Board Member	PO Box 999, 100 East Fifth Street, Chester, PA 19016
John Nagle – Vice Chairman	PO Box 999, 100 East Fifth Street, Chester, PA 19016
Jane Billings- Assist. Secretary/Treasurer	PO Box 999, 100 East Fifth Street, Chester, PA 19016
Anthony Moss Sr Treasurer	PO Box 999, 100 East Fifth Street, Chester, PA 19016
Ieasa A. Nichols – Board Member	PO Box 999, 100 East Fifth Street, Chester, PA 19016
	·

List the names and business address of persons with	n overall management responsibility for the process
being permitted (i.e. plant manager).	

Business Address		
PO Box 999, 100 East Fifth Street, Chester, PA 19016		

Plan Approvals or Operating Permits. List all plan approvals or operating permits issued by the Department or an approved local air pollution control agency under the APCA to the applicant or related parties that are currently in effect or have been in effect at any time 5 years prior to the date on which this form is notarized. This list shall include the plan approval and operating permit numbers, locations, issuance and expiration dates. Attach additional sheets as necessary.

Air Contamination Source	Plan Approval/ Operating Permit#	Location	Issuance Date	Expiration Date
Sludge Holding Tanks	Plan Approval 23-00038E	3201 West Front Street Chester, PA 19013	10/07/2013	04/21/2014
Sewage Sludge Incinerator 1 & 2; WWT Process; Sludge Holding Tanks	TVOP No. 23- 00038 Amendment	3201 West Front Street Chester, PA 19013	05/21/2013	02/21/2018
Sewage Sludge Incinerator 1 & 2; WWT Process; Sludge Holding Tanks	TVOP No. 23- 00038 Renewal	3201 West Front Street Chester, PA 19013	2/21/2013	02/21/2018
Sewage Sludge Incinerator 1 & 2; WWT Process; Sludge Holding Tanks	TVOP No. 23- 00038 Renewal	3201 West Front Street Chester, PA 19013	12/17/2018	12/17/2023
Sewage Sludge Incinerator 1 & 2 Boiler Mact .	Plan Approval 23-0038C	3201 West Front Street Chester, PA 19013	01/22/2015	07/22/2016
Sewage Sludge Incinerator 1 & 2 Boiler Mact .	Plan Approval 23-0038C Amended 4/18/2017	3201 West Front Street Chester, PA 19013	07/22/2016	1/22/2017
Sewage Sludge Incinerator 1& 2 PAL	Plan Approval Extension 23-0038D	3201 West Front Street Chester, PA 19013	11/28/2012	05/28/2013
Sewage Sludge Incinerator 1 & 2 PAL	Plan Approval 23-0038D	3201 West Front Street Chester, PA 19013	08/24/2011	02/24/2012
Sewage Sludge Incinerator 1 & 2 PAL	Plan Approval 23-0038D	3201 West Front Street Chester, PA 19013	08/24/2011	8/24/2021
Sewage Sludge Incinerator 1 & 2 Bio Filter	Plan Approval 23-0038E	3201 West Front Street Chester, PA 19013	1/21/2015	7/20/2015

Sewage Sludge Incinerator 1 & 2 Bio Filter	Plan Approval 23-0038E	3201 West Front Street Chester, PA 19013	7/21/2015	1/20/2016
Sewage Sludge Incinerator 1 & 2	Plan Approval 23-0038E	3201 West Front Street Chester, PA 19013	1/21/2016	7/21/2016
Sewage Sludge Incinerator 1 & 2	Plan Approval 23-0038E Amended 4/18/2017	3201 West Front Street Chester, PA 19013	7/21/2016	1/22/2017
Sewage Sludge Incinerator 1 & 2 (Wet Esp-RTO)	Plan Approval 23-0038F	3201 West Front Street Chester, PA 19013	04/01/2015	10/01/2016
Sewage Sludge Incinerator 1 & 2 (Wet Esp-RTO)	Plan Approval 23-0038F	3201 West Front Street Chester, PA 19013	10/02/2016	4/2/2017
Sewage Sludge Incinerator 1 & 2 (Wet Esp-RTO)	Plan Approval 23-0038F	3201 West Front Street Chester, PA 19013	03/024/2017	10/03/2017
Sewage Sludge Incinerator 1 & 2 (Wet Esp-RTO)	Plan Approval 23-0038F	3201 West Front Street Chester, PA 19013	010/03/2017	04/01/2018
Sewage Sludge Incinerator 1 & 2 (Wet Esp-RTO)	Plan Approval 23-0038F	3201 West Front Street Chester, PA 19013	04/01/2018	09/28/2018
Sewage Sludge Incinerator 1 & 2 (Wet Esp-RTO)	Plan Approval 23-0038F	3201 West Front Street Chester, PA 19013	09/27/2018	3/27/2019
Sewage Sludge Incinerator 1 & 2 (Wet Esp-RTO)	Plan Approval 23-0038F	3201 West Front Street Chester, PA 19013	3/27/2019	9/27/2019
Sewage Sludge Incinerator 1 & 2 (Wet Esp-RTO)	Plan Approval 23-0038F	3201 West Front Street Chester, PA 19013	3/27/2020	9/27/2020
Sewage Sludge Incinerator 1 & 2 (Wet Esp-RTO)	Plan Approval 23-0038F	3201 West Front Street Chester, PA 19013	9/27/2020	3/27/2021
Sewage Sludge Incinerator 1 & 2 (Wet Esp-RTO)	Plan Approval 23-0038F	3201 West Front Street Chester, PA 19013	3/27/2021	9/27/2021
Sewage Sludge Incinerator 1 & 2 (Wet Esp-RTO)	Plan Approval 23-0038F	3201 West Front Street Chester, PA 19013	9/27/2021	3/27/2022
Sewage Sludge Incinerator 1 & 2 (Wet Esp-RTO)	Plan Approval 23-0038F	3201 West Front Street Chester, PA 19013	3/27/2022	9/27/2022
Sewage Sludge Incinerator 1 & 2 (Wet Esp-RTO)	Plan Approval 23-0038F	3201 West Front Street Chester, PA 19013	9/27/2022	3/27/2023
Sewage Sludge Incinerator 1 & 2 (Wet Esp-RTO)	Plan Approval 23-0038F	3201 West Front Street Chester, PA 19013	3/27/2023	9/27/2023
Sewage Sludge Incinerator 1 & 2 (Wet Esp-RTO)	Plan Approval 23-0038F	3201 West Front Street Chester, PA 19013	8/8/2023	2/8/2024
Sewage Sludge Incinerator 1 & 2 (Wet Esp-RTO)	Plan Approval 23-0038F	3201 West Front Street Chester, PA 19013	2/8/2024	8/8/2024

Sewage Sludge Incinerator 1 & 2 (Wet Esp-RTO)	Plan Approval 23-0038F	3201 West Front Street Chester, PA 19013	8/8/2024	2/8/2025
BFP Scrubber differential pressure	Plan Approval 23-0038G Amended	3201 West Front Street Chester, PA 19013	9/21/2018	3/27/2020

Compliance Background. (Note: Copies of specific documents, if applicable, must be made available to the Department upon its request.) List all documented conduct of violations or enforcement actions identified by the Department pursuant to the APCA, regulations, terms and conditions of an operating permit or plan approval or order by applicant or any related party, using the following format grouped by source and location in reverse chronological order. Attach additional sheets as necessary. See the definition of "documented conduct" for further clarification. Unless specifically directed by the Department, deviations which have been previously reported to the Department in writing, relating to monitoring and reporting, need not be reported. – Ordered Chronologically by date received.

Date	Location	Plan Approval/ Operating Permit#	Nature of Documented Conduct	Type of Department Action	Status: Litigation Existing/ Continuing or Corrected/Date	Dollar Amount Penalty
CACP EMAIL DATED 6/21/2024 (various source testing dates 2023)	WRTP	TVOP-23- 00038	1/26/2022-FAILURE TO SUBMIT STACK TEST RESULTS WHEN DUE / VARIOUS DATES 2023 STACK TESTING VIOLATIONS / HCI EMISSIONS VIOLATIONS	CACP	Consent Assessment of civil penalty	\$10,350.00
NOV DATED 4/26/2023	WRTP	TVOP-23- 00038	HCI SOURCE TESTING & EMISSIONS (FEBRUARY 2023)	NOV	WRITTEN RESPONSE BY MJD ON 5/17/2023 VIA EMAIL ONLY TO HEATHER HENRY	None
Various Source testing Dates (2016-2021)	DELCORA WRTP	TVOP 23- 00038	FAILURE TO SUBMIT VARIOUS SOURCE TESTING RESULTS WHEN DUE / FAILURE TO FOLLOW STACK TEST PROTOCOLS (various 2016-2021)	CACP	Consent Assessment of civil penalty	\$31,650.00
NOV DATED 4/4/2022	DELCORA WRTP	TVOP-23- 00038	Failure to follow HCI SOURCE TESTING PROTOCOL (FEBRUARY 2021)	NOV	WRITTEN RESPONSE BY MJD ON 4/12/2022 VIA EMAIL ONLY TO HEATHER HENRY	None
NOV DATED 3/1/2022	DELCORA WRTP	TVOP-23- 0038	FAILURE TO SUBMIT VARIOUS SOURCE TESTING RESULTS WHEN DUE / FAILURE TO FOLLOW STACK TEST PROTOCOLS (various 2016-2021)	NOV	WRITTEN RESPONSE BY MJD ON 3/30/2022 VIA EMAIL ONLY TO HEATHER HENRY	None
Nov Dated 10/13/2021	DELCORA WRTP	TVOP-23- 0038	Failure to submit various TITLE V SEMI-ANNUAL REPORTS (FOR JAN-JUNE2021)	NOV	Written response by MJD ON 10/25/2021 VIA EMAIL ONLY TO HEATHER HENRY	None
Nov 2020- April 2021	DELCORA WRTP	TVOP-23- 0038	Bypass incidents& Emissions Violations	CACP	Consent Assessment of civil penalty	\$20,075.00

Compliance review on 8/20/2021 of 2/2021 stack test	DELCORA WRTP	TVOP-23- 0038	Fugitive Emissions - ASH	NOV	No response Due send notice to Heather Henry within 15 days of ash system upgrade	None
Inspection on 8/9/2021	DELCORA WRTP	TVOP-23- 00038	Nov dated 8/13/2021 received by MJD via email	NOV	Installation without a Plan Approval or Operating permit	None
Comp. inspection 3/26 & 3/30 and 4/15/21	DELCORA WRTP	TVOP-23- 0038	VOC Emissions/Operator Training /Fugitive Emissions/ Failure to submit Annual Compliance Reports 2018-2020	NOV	Written response by MJD on 5/14/2021 via email to Heather Henry.	None
Various-1/1- 6/30/2020 PAL Emissions/ Monitoring Report & 16 Inc. Bypasses	DELCORA WRTP	TVOP-23- 0038	PADEP Review of 1/1-6/30/2020 PAL Emissions /Monitoring Report & 16 Incinerator bypass events from 7/31- 10/21/2020	NOV	Written response by MJD on 11/17/2020 via email to Heather Henry.	None
Inc. #1 &2 12/24/2017 through 10/31/2019	DELCORA WRTP	23-00038 PA23- 00038F	Incinerator exhausted in series to a Quench and Multiple Venturi Scrubber, WESP and RTO, Bypass open when charging sludge.	CACP	Consent Assessment of civil penalty signed & fine paid 1/9/2020	\$7770.00
5/10 & 5/28/2017- INC.#1  (DEP. Results review of Semi-Annual Comp. Report)	DELCORA WRTP	TVOP-23- 00038	Daily Throughput Exceedances	NOV (dated 5/29/2018)	Consent Assessment of civil penalty	\$1320.00
VARIOUS dates 3/21/2019- 7/17/2019	DELCORA WRTP	TVOP-23- 0038& Plan Approval 23-0038F	Sewage sludge Incinerator Bypass Incidents	NOV (dated 7/24/2019)	Written Response Sent on 9/19/2019 with update	None
VARIOUS dates April 2018 -March 2019	DELCORA WRTP	TVOP-23- 0038& Plan Approval 23-0038F	Bypass incidents & emission violations	NOV (dated 4/1/2019)	Written Response of 4/25/2019 Requesting meeting	None
Inc. #1 August 2016 & Inc.#2 August 2017	DELCORA WRTP	TVOP-23- 00038	Exceedance of HC1 emission limit SUBPART MMMM	CACP	Consent Assessment of civil penalty	\$9925.00

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5/10 & 5/28/2017- INC.#1  (DEP. Results review of Semi-Annual Comp. Report)	DELCORA WRTP	TVOP-23- 00038	Daily Throughput Exceedances	NOV	NO RESPONSE REQUESTED AT THIS TIME – Consent Assessment received at later date.	None
8/23-24/2017 source testing performed- DEP results review 11/20/2017	DELCORA WRTP	23-00038 PA23- 00038F	Exceedance of HC1 emission limit	NOV	Written Response of 12/19/2017	None
6/14-15/2017 Air Emission Inspection	DELCORA WRTP	TVOP-23- 00038	BFP Room Process Scrubber- Pressure Drop Below Permitted Range From 2/216 To 6/2017	NOV	Written Response of 7/12/2017 Requesting Meeting / 2 nd Written response mailed 9/22/2017	None
8/17-19/2016 source testing performed- DEP results review on 3/2/2017	DELCORA WRTP	23-00038 PA23- 00038F	Exceedance of HC1 Emission limit/Failure to provide test report within 60 Days of source testing	NOV	No Response Requested	None
Operating Permit/3 rd Qtr. 2016	DELCORA WRTP	23-00038 PA23- 00038E	Operating Permit & CEMS violations 3 RD Qtr 2016 (Oder /Late Report)	CACP	Consent Assessment of civil penalty	\$9900.00
8/26/2016 Inspection	DELCORA WRTP	23-00038 PA23- 00038E	ODOR COMPLIANT	NOV	Comply/Closed (written response 9/19/2016)	None
3 rd & 4 th Qtr. 2015 & 1 ST Qtr. 2016	DECORA WRTP	23-00038 PA23- 00038E	CEMS violations- Dry solids exceedances & temperature limitations	CACP	Consent Assessment of civil penalty	\$3900.00
various dates 2015	DELCORA WRTP	23-00038 PA23- 00038E	For several sludge generators /B4 scrubber water flow rate not monitored for 47 days.	NOV	Corrective Actions included in TVOP compliance certification	None
various dates 2013-2014	DELCORA WRTP	23-00038 PA23- 00038E	Dry solids exceedances & air emissions violations & failure to timely submit SOP-Prev Maint schedules	CACP	Comply/Closed (12/24/2015)	\$6270.00
6/17/2015 Various	DELCORA WRTP	23-00038	CEMS violation – temperature limitations for incinerator #1 & #2	CACP	Comply/Closed	\$600.00

2 nd QTR (2015) temp exc.	DELCORA WRTP	23-00038	CEMS violation – temperature limitations for incinerator #1 & #2	CACP	Comply/Closed	\$1200.00
6/5 -6/8 2015	DELCORA WRTP	23-00038	Dry solids feed exceedances INC #2	NOV	Comply/Closed (written response)	None
4/2015	DELCORA WRTP	23-00038	Dry solids feed exceedances INC #1 & #2	NOV	Comply/Closed	None
4 TH QTR 2014 & 1 st QTR 2015	DELCORA WRTP	23-00038	CEMs - temperature limitations for SSI 2	CACP	Comply/Closed	\$1000.00
11/4/2014	DELCORA WRTP	23-00038	CEMS violation – temperature limitations for incinerator #1 & #2	CACP	Comply/Closed	\$400.00
08/26/2014	DELCORA WRTP	23-00038	CEM Failure	CACP	Comply/Closed	\$200.00
06/02/2014	DELCORA WRTP	23-00038	CEM Failure	CACP	Comply/Closed	\$800.00
03/07/2014	DELCORA WRTP	23-00038	CEM Failure	CACP	Comply/Closed	\$2,400.00
01/14/2014	DELCORA WRTP	23-00038	CEM Failure	CACP	Comply/Closed	\$600.00
11/01/2013	DELCORA WRTP	23-00038	Maximum heat release condition	CACP	Comply/Closed	\$4,500.00
09/25/2013	DELCORA WRTP	23-00038	CEM Failure	CACP	Comply/Closed	\$400.00
07/12/2013	DELCORA WRTP	23-00038	CEM Failure	CACP	Comply/Closed	\$200.00
06/20/2013	DELCORA WRTP	23-00038	Inconsistent with good operating practice (2)	NOV	_	None
04/02/2013	DELCORA WRTP	23-00038	NOx emission exceedances & VOC rolling totals not maintained	CACP	Comply/Closed	\$4,430.00
03/13/2013	DELCORA WRTP	23-00038	CEMs - temperature limitations for SSI 2	CACP	Comply/Closed	\$1,000.00
12/27/2012	DELCORA WRTP	23-00038	CEMs - temperature limitations for SSI 1 & 2	CACP	Comply/Closed	\$400.00
09/14/2012	DELCORA WRTP	23-00038	CEMs - temperature limitations for SSI 1 & 2	CACP	Comply/Closed	\$800.00
06/21/2012	DELCORA WRTP	23-00038	CEMs - temperature limitations for SSI 1 & 2	CACP	Comply/Closed	\$600.00
04/06/2012	DELCORA WRTP	23-00038	Maximum heat release & NOx exceedances	NOV	Comply/Closed	None
12/20/2011	DELCORA WRTP	23-00038	CEMs - temperature limitations for SSI 1	CACP	Comply/Closed	\$200.00
11/23/2011	DELCORA WRTP	23-00038	CEMs - temperature limitations for SSI 1 & 2	CACP	Comply/Closed	\$1,000.00

11/02/2011	DELCORA WRTP	23-00038	Dry solids throughputs and maximum heat release exceedances	CACP	Comply/Closed	\$11,275.00
04/21/2011	DELCORA WRTP	23-00038	CEMs - temperature limitations for SSI 1 & 2	CACP	Comply/Closed	\$2,000.00
02/08/2011	DELCORA WRTP	23-00038	Maximum heat release exceedances and fuel oil sulfur content certification	NOV	Comply/Closed	None
10/01/2010	DELCORA WRTP	23-00038	CEMs - temperature limitations for SSI 1 & 2	CACP	Comply/Closed	\$400.00
06/30/2010	DELCORA WRTP	23-00038	CEMs – temperature, THC & O ₂ limitations for SSI 1 & 2; stack thermocouple not certified	CACP	Comply/Closed	\$14,950.00
05/08/2009	DELCORA WRTP	23-00038	CEMs - temperature limitations for SSI 1 & 2	NOV	Comply/Closed	None
04/20/2009	DELCORA WRTP	23-00038	CEMs - temperature limitations for SSI 1	CACP	Comply/Closed	\$600.00

List all incidents of deviations of the APCA, regulations, terms and conditions of an operating permit or plan approval or order by applicant or any related party, using the following format grouped by source and location in reverse chronological order. This list must include items both currently known and unknown to the Department. Attach additional sheets as necessary. See the definition of "deviations" for further clarification.

Date	Location	Plan Approval/ Operating Permit#	Nature of Deviation	Incident Status: Litigation Existing/Continuing Or Corrected/Date
No incidents or deviations other than those documented in previous section.				

<u>CONTINUING OBLIGATION</u>. Applicant is under a continuing obligation to update this form using the Compliance Review Supplemental Form if any additional deviations occur between the date of submission and Department action on the application.

VERIFICATION STATEMENT

Subject to the penalties of Title 18 Pa.C.S. Section 4904 and 35 P.S. Section 4009(b)(2), I verify under penalty of law that I am authorized to make this verification on behalf of the Applicant/Permittee. I further verify that the information contained in this Compliance Review Form is true and complete to the best of my belief formed after reasonable inquiry. I further verify that reasonable procedures are in place to ensure that "documented conduct" and "deviations" as defined in 25 Pa Code Section 121.1 are identified and included in the information set forth in this Compliance Review Form.

Signature 9/9/2027

Michael J. DiSantis
Name (Print or Type)

Director of Operations & Maintenance

Title

APPENDIX C. MUNICIPAL NOTIFICATIONS

211 Welsh Pool Rd, Ste 238, Exton, PA 19341 / P 610.280.3902 / **trinityconsultants.com**

February 26, 2025

Delaware County Council Members Delaware County Government Center 201 West Front Street Media, PA 19063

UPS Tracking No. 1Z865F4F0197162585

RE: Title V Renewal Application DELCORA, Chester Facility Operating Permit No.: 23-00038

Dear Council Members,

Pursuant to 25 Pa. Code § 127.413 of the Pennsylvania Code, Delaware County Regional Water Quality Authority (DELCORA) hereby notifies Delaware County of the application of the Title V Renewal to the Pennsylvania Department of Environmental Protection (PADEP) concerning its wastewater treatment facility located in Chester, Delaware County, Pennsylvania. The facility currently operates under Title V Permit No. 23-00038 issued December 17, 2018 and revised May 2, 2022. Note that DELCORA submitted a Title V renewal application six months prior to the current permit's expiration date, which is now being reviewed by the PADEP. Because of this, they are covered by the permit shield of their current permit.

This secondary TVOP permit application is in order to comply with 25 Pa Code 129.11(d)(2). DELCORA is submitting a case-by-case RACT determination per 25 Pa Code 129.114(b) for their two (2) sewage sludge incineration units.

Pennsylvania Code Title 25 (Environmental Protection – Air Resources) Section 127.413 requires municipal notification including a 30-day comment period regarding the permit application, which begins upon receipt of this formal notification. During this comment period, PADEP will accept such comments. Comments are to be sent to:

Air Quality – Environmental Program Manager Pennsylvania Department of Environmental Protection Southeast Regional Office 2 E. Main Street, Norristown, PA 19401 Phone: (484) 250-5900

Written comments should include the name, address and telephone number of the person(s) submitting the comments along with the reference number of the proposed permit.

Delaware County Council - Page 2 February 26, 2025

Matter Dage

If you have any questions regarding this application or require any additional information, please feel free to contact me at (610) 280-3902 x2353 or via e-mail at mpage@trinityconsultants.com.

Sincerely,

Matthew Page

Managing Consultant

TRINITY CONSULTANTS

211 Welsh Pool Rd, Ste 238, Exton, PA 19341 / P 610.280.3902 / **trinityconsultants.com**

February 26, 2025

Mr. Stefan Roots Mayor, City of Chester 1 E Fourth Street Chester, PA 19103

UPS Tracking No. 1Z865F4FPG94714886

RE: Title V Renewal Application DELCORA, Chester Facility Operating Permit No.: 23-00038

Dear Mr. Kirkland,

Pursuant to 25 Pa. Code § 127.413 of the Pennsylvania Code, Delaware County Regional Water Quality Authority (DELCORA) hereby notifies the City of Chester of the application of the Title V Renewal to the Pennsylvania Department of Environmental Protection (PADEP) concerning its wastewater treatment facility located in Chester, Delaware County, Pennsylvania. The facility operates under Title V Permit No. 23-00038 issued December 17, 2018 and revised May 2, 2022. Note that DELCORA submitted a Title V renewal application six months prior to the current permit's expiration date, which is now being reviewed by the PADEP. Because of this, they are covered by the permit shield of their current permit.

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Written comments should include the name, address and telephone number of the person(s) submitting the comments along with the reference number of the proposed permit.

Stefan Roots - Page 2 February 26, 2025

If you have any questions regarding this application or require any additional information, please feel free to contact me at (610) 280-3902 x2353 or via e-mail at mpage@trinityconsultants.com.

Sincerely,

Matthew Page

Managing Consultant

TRINITY CONSULTANTS

Matter Dage