



**New York State Department of Environmental Conservation
Permit Review Report**

**Permit ID: 7-3142-00028/00009
Renewal Number: 1
08/09/2011**

**Permit Description
Introduction**

The Title V operating air permit is intended to be a document containing only enforceable terms and conditions as well as any additional information, such as the identification of emission units, emission points, emission sources and processes, that makes the terms meaningful. 40 CFR Part 70.7(a)(5) requires that each Title V permit have an accompanying "...statement that sets forth the legal and factual basis for the draft permit conditions". The purpose for this permit review report is to satisfy the above requirement by providing pertinent details regarding the permit/application data and permit conditions in a more easily understandable format. This report will also include background narrative and explanations of regulatory decisions made by the reviewer. It should be emphasized that this permit review report, while based on information contained in the permit, is a separate document and is not itself an enforceable term and condition of the permit.

Summary Description of Proposed Project

Application for renewal of Air Title V Facility.

Attainment Status

ONONDAGA CO RESOURCE RECOVERY FACILITY is located in the town of ONONDAGA in the county of ONONDAGA.

The attainment status for this location is provided below. (Areas classified as attainment are those that meet all ambient air quality standards for a designated criteria air pollutant.)

Criteria Pollutant	Attainment Status
Particulate Matter (PM)	ATTAINMENT
Particulate Matter < 10µ in diameter (PM10)	ATTAINMENT
Sulfur Dioxide (SO2)	ATTAINMENT
Ozone*	TRANSPORT REGION (NON-ATTAINMENT)
Oxides of Nitrogen (NOx)**	ATTAINMENT
Carbon Monoxide (CO)	ATTAINMENT

* Ozone is regulated in terms of the emissions of volatile organic compounds (VOC) and/or oxides of nitrogen (NOx) which are ozone precursors.

** NOx has a separate ambient air quality standard in addition to being an ozone precursor.

Facility Description:

The Onondaga County Resource Recovery Facility (OCRRF) is a 990 ton per day nominally sized waste-to-energy facility. The ocrf consists of three independent mass burn combustors with waterwall boilers, each with a design capacity of 330 tons per day (reference waste of 6000 btu/lb). Refuse is delivered to the OCRRF in standard packer trucks and transfer vehicles for combustion. Refuse is reduced approximately 90% by volume in the combustion process. Heat energy generated in the combustion process is utilized to produce electricity in a 39.5 megawatt turbine generator. This electricity provides power to the OCRRF and the excess is sold to a power reseller or broker. Auxiliary burners firing natural gas are used during periods of startup, shutdown and at other times when the minimum combustion zone temperatures would not otherwise be met. Air pollution control includes dry scrubbers for acid gas control, fabric filters for particulate removal, a selective non-catalytic reduction (snrc) system for nox control and a carbon

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injection system for mercury control.

Permit Structure and Description of Operations

The Title V permit for ONONDAGA CO RESOURCE RECOVERY FACILITY

is structured in terms of the following hierarchy: facility, emission unit, emission point, emission source and process. A facility is defined as all emission sources located at one or more adjacent or contiguous properties owned or operated by the same person or persons under common control. The facility is subdivided into one or more emission units (EU). Emission units are defined as any part or activity of a stationary facility that emits or has the potential to emit any federal or state regulated air pollutant. An emission unit is represented as a grouping of processes (defined as any activity involving one or more emission sources (ES) that emits or has the potential to emit any federal or state regulated air pollutant). An emission source is defined as any apparatus, contrivance or machine capable of causing emissions of any air contaminant to the outdoor atmosphere, including any appurtenant exhaust system or air cleaning device. [NOTE: Indirect sources of air contamination as defined in 6 NYCRR Part 203 (i.e. parking lots) are excluded from this definition]. The applicant is required to identify the principal piece of equipment (i.e., emission source) that directly results in or controls the emission of federal or state regulated air pollutants from an activity (i.e., process). Emission sources are categorized by the following types:

- combustion - devices which burn fuel to generate heat, steam or power
- incinerator - devices which burn waste material for disposal
- control - emission control devices
- process - any device or contrivance which may emit air contaminants that is not included in the above categories.

ONONDAGA CO RESOURCE RECOVERY FACILITY is defined by the following emission unit(s):

Emission unit 1MBMWF - Three mass burn Municipal Waste Combustors, each with a nominal rating of 330 tons per day (reference waste of 6,000 Btu/lb). The three combustors utilize Martin Stoker technology with waterwall furnaces. Each combustor exhausts through a separate flue contained within a common stack. Air pollution control equipment includes dry scrubbers for acid gas control, fabric filters for particulate removal, a Selective Non-Catalytic Reduction (SNCR) system for control of nitrogen oxides and a carbon injection system for mercury and dioxin/furan control. The OCRRF employs a Continuous Emissions Monitoring System (CEMS) that provides continuous feedback on the effectiveness of the air pollution control (APC) equipment. In addition, the facility has selected to install a dry activated carbon injection system to achieve full compliance with the 40CFR60, Subpart Cb limits for mercury and dioxins. Activated carbon will be injected from a common storage silo into the existing flue gas ductwork downstream of the economizer of each combustion unit. The system will consist of three independent carbon injection trains, each dedicated to one of the three combustion trains.

Fuel: The base operating scenario for the OCRRF includes the combustion of solid waste in three 330 tons per day units. The facility is authorized to receive the following waste streams: Municipal Solid Waste (MSW) which includes residential, commercial and governmental and/or institutional waste; the combustible portion of construction and demolition (C&D) debris; light industrial waste; treated regulated medical waste and treated and destroyed medical waste; and other non-hazardous industrial waste streams as approved by NYSDEC. All material combusted at the OCRRF will collectively be referred to herein as Solid Waste (SW) for the extent of the Title V permit. The OCRRF will maintain compliance with all existing permit limits when handling the waste streams described above for the base operating scenario.

Auxiliary Fuel: The OCRRF uses natural gas as an auxiliary fuel. Natural gas is used during startup to warm the unit up to the minimum required combustion zone temperature before introducing SW into the furnace and during the transition period before the fires are fully sustained by the SW. Natural gas is used



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as an auxiliary fuel during shutdown in order to maintain minimum combustion zone temperature requirements until SW is burned off the grates. Auxiliary fuel is also used during periods of upset and at any other time the furnace temperature/residence time requirements would not otherwise be met.

Warm-up: Natural gas is the fuel used during the warm-up period at the OCRRF. The OCRRF is in the warm-up stage when only fossil fuel is being fired in order to warm the unit up to minimum combustion zone temperatures, or to keep the unit warm, before MSW feeding has commenced.

Start-up: As indicated in the facility's approved O&M Manual, startup is initiated at the OCRRF when a boiler's feedchute damper is opened and continuous burning of MSW is commenced.

Continuous Burning: 40 CFR 60.58(a)(2) defines continuous burning as, "the continuous, semi-continuous, or batch feeding of MSW for the purposes of waste disposal, energy production, or providing heat to the combustion system in preparation for waste disposal or energy production. The use of MSW solely to provide thermal protection of the grate or hearth during the start-up period shall not be considered to be continuous burning."

Shutdown: The shutdown period for a boiler begins when the continuous burning of MSW is ceased and the shutdown period ends when refuse is burned off the grates. As indicated in the OCRRF's approved O&M Manual, the shutdown period at the OCRRF commences when the subject unit's feedchute damper is shut (this is the time at which continuous feeding is ceased). Shutdown of a unit is complete when solid waste is burned off the grates. The operator verifies that the shutdown is complete by visually inspecting the grates to make sure the fires are out.

Malfunction: 40 CFR 60.2 defines malfunction as, "any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions." Malfunction is similarly defined in 6 NYCRR Part 201-2 as, "any sudden and unavoidable failure of an air cleaning device or air contamination source to operate in compliance with all applicable parts of this Chapter [6 NYCRR Part 201], and shall not include failures that are caused entirely or partially by poor maintenance, careless operation, or other preventable condition."

Emergency Conditions: 6 NYCRR Part 201-2(b)(12) defines emergency as, "any situation arising from suddenly and reasonably unforeseeable events beyond the control of the owner and/or operator of a facility, including acts of God, which situation requires immediate corrective action to restore normal operation and which causes the emission source to exceed a technology-based requirement under the permit of state-established emission limitations, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error."

Emission unit 1MBMWF is associated with the following emission points (EP):
00001, 00002, 00003

Process: MS1 is located at Building 1 - One of three 330 tons per day (reference waste of 6000 Btu/lb) municipal waste combustors, firing Solid Waste (SW). SW includes: Municipal Solid Waste (which includes residential, commercial and institutional and/or governmental waste); combustible portion of construction and demolition (C&D) debris; light industrial waste; treated regulated medical waste; treated and destroyed medical waste; and NYSDEC approved non-hazardous industrial waste streams.

Natural gas is used as an auxiliary fuel during startup, shutdown and malfunctions as described below and at other times when the minimum combustion zone temperature would not otherwise be met.



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40 CFR 60.58a(a)(1) reads, "the startup period commences when the affected facility begins the continuous burning of MSW and does not include any warmup period when the affected facility is combusting only a fossil fuel or other non-MSW fuel and no MSW is being combusted."

The OCRRF facility is subject to 40 CFR 60.58a which regulates certain compliance and performance testing requirements at the OCRRF including startup, shutdown and malfunction relief. 40 CFR 60.58a(a) reads, "the standards under this subpart apply at all times except during periods of startup, shutdown or malfunction; provided however that the duration of startup, shutdown and malfunction shall not exceed three hours per occurrence." The standards regulated under this subpart, for which the regulations provide startup, shutdown or malfunction relief, are particulate matter, opacity, sulfur dioxide, hydrogen chloride, nitrogen oxides, carbon monoxide and baghouse inlet temperature. Furthermore, combustion index, as well as additional permit limits for the constituents listed above, are afforded the same relief. Combustion index is based on the carbon monoxide measurement ($CI = CO_2 * 100 / (CO_2 + CO)$) and addresses the same principal as the carbon monoxide permit limit, ie. requiring a certain combustion efficiency.

The definition of malfunction relief pursuant to 40 CFR 60.58a(a) as discussed above, as well as malfunction relief for additional regulated parameters from NYSDEC on a case by case basis pursuant to 6 NYCRR Part 201-1.4 applies to the OCRRF. The definition of emergency defense pursuant to 6 NYCRR Part 201-1.5 also applies to the OCRRF.

Startup, shutdown and malfunction relief would apply in those relatively few instances in which emissions limits developed for steady state operation can not be maintained due to these relatively brief transitional periods. Emergency defense would apply in rare instances in which emission limits developed for steady-state operation can not be maintained due to an emergency as defined in 6 NYCRR Part 201-2(b)(12).

The following definitions will be used to identify the mode of operation of the MWC.

Warm-up: Natural gas is the fuel used during the warm-up period at the OCRRF. The OCRRF is in the warm-up stage when only fossil fuel is being fired in order to warm the unit up to minimum combustion zone temperatures, or to keep the unit warm, before MSW feeding has commenced.

Start-up: As indicated in the facility's approved O&M Manual, startup is initiated at the OCRRF when a boiler's feedchute damper is opened and continuous burning of MSW is commenced.

Continuous Burning: 40 CFR 60.58(a)(2) defines continuous burning as, "the continuous, semi-continuous, or batch feeding of MSW for the purposes of waste disposal, energy production, or providing heat to the combustion system in preparation for waste disposal or energy production. The use of MSW solely to provide thermal protection of the grate or hearth during the start-up period shall not be considered to be continuous burning."

Shutdown: The shutdown period for a boiler begins when the continuous burning of MSW is ceased and the shutdown period ends when refuse is burned off the grates. As indicated in the OCRRF's approved O&M Manual, the shutdown period at the OCRRF commences when the subject unit's feedchute damper is shut (this is the time at which continuous feeding is ceased). Shutdown of a unit is complete when solid waste is burned off the grates. The operator verifies that the shutdown is complete by visually inspecting the grates to make sure the fires are out.

Malfunction: 40 CFR 60.2 defines malfunction as, "any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are



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not malfunctions." Malfunction is similarly defined in 6 NYCRR Part 201-2 as, "any sudden and unavoidable failure of an air cleaning device or air contamination source to operate in compliance with all applicable parts of this Chapter [6 NYCRR Part 201], and shall not include failures that are caused entirely or partially be poor maintenance, careless operation, or other preventable condition."

Emergency Conditions: 6 NYCRR Part 201-2(b)(12) defines emergency as, "any situation arising from suddenly and reasonably unforeseeable events beyond the control of the owner and/or operator of a facility, including acts of God, which situation requires immediate corrective action to restore normal operation and which causes the emission source to exceed a technology-based requirement under the permit of state-established emission limitations, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error."

Process: MS2 is located at Building 1 - One of three 330 tons per day (reference waste of 6000 Btu/lb) municipal waste combustors, firing Solid Waste (SW). SW includes: Municipal Solid Waste (which includes residential, commercial and institutional and/or governmental waste); combustible portion of construction and demolition (C&D) debris; light industrial waste; treated regulated medical waste; treated and destroyed medical waste; and NYSDEC approved non-hazardous industrial waste streams.

Natural gas is used as an auxiliary fuel during startup, shutdown and malfunctions as described below and at other times when the minimum combustion zone temperature would not otherwise be met.

40 CFR 60.58a(a)(1) reads, "the startup period commences when the affected facility begins the continuous burning of MSW and does not include any warmup period when the affected facility is combusting only a fossil fuel or other non-MSW fuel and no MSW is being combusted."

The OCRRF facility is subject to 40 CFR 60.58a which regulates certain compliance and performance testing requirements at the OCRRF including startup, shutdown and malfunction relief. 40 CFR 60.58a(a) reads, "the standards under this subpart apply at all times except during periods of startup, shutdown or malfunction; provided however that the duration of startup, shutdown and malfunction shall not exceed three hours per occurrence." The standards regulated under this subpart, for which the regulations provide startup, shutdown or malfunction relief, are particulate matter, opacity, sulfur dioxide, hydrogen chloride, nitrogen oxides, carbon monoxide and baghouse inlet temperature. Furthermore, combustion index, as well as additional permit limits for the constituents listed above, are afforded the same relief. Combustion index is based on the carbon monoxide measurement ($CI = CO_2 * 100 / (CO_2 + CO)$) and addresses the same principal as the carbon monoxide permit limit, ie. requiring a certain combustion efficiency.

The definition of malfunction relief pursuant to 40 CFR 60.58a(a) as discussed above, as well as malfunction relief for additional regulated parameters from NYSDEC on a case by case basis pursuant to 6 NYCRR Part 201-1.4 applies to the OCRRF. The definition of emergency defense pursuant to 6 NYCRR Part 201-1.5 also applies to the OCRRF.

Startup, shutdown and malfunction relief would apply in those relatively few instances in which emissions limits developed for steady state operation can not be maintained due to these relatively brief transitional periods. Emergency defense would apply in rare instances in which emission limits developed for steady-state operation can not be maintained due to an emergency as defined in 6 NYCRR Part 201-2(b)(12).

The following definitions will be used to identify the mode of operation of the MWC.

Warm-up: Natural gas is the fuel used during the warm-up period at the OCRRF. The OCRRF is in the warm-up stage when only fossil fuel is being fired in order to warm the unit up to minimum combustion



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zone temperatures, or to keep the unit warm, before MSW feeding has commenced.

Start-up: As indicated in the facility's approved O&M Manual, startup is initiated at the OCRRF when a boiler's feedchute damper is opened and continuous burning of MSW is commenced.

Continuous Burning: 40 CFR 60.58(a)(2) defines continuous burning as, "the continuous, semi-continuous, or batch feeding of MSW for the purposes of waste disposal, energy production, or providing heat to the combustion system in preparation for waste disposal or energy production. The use of MSW solely to provide thermal protection of the grate or hearth during the start-up period shall not be considered to be continuous burning."

Shutdown: The shutdown period for a boiler begins when the continuous burning of MSW is ceased and the shutdown period ends when refuse is burned off the grates. As indicated in the OCRRF's approved O&M Manual, the shutdown period at the OCRRF commences when the subject unit's feedchute damper is shut (this is the time at which continuous feeding is ceased). Shutdown of a unit is complete when solid waste is burned off the grates. The operator verifies that the shutdown is complete by visually inspecting the grates to make sure the fires are out.

Malfunction: 40 CFR 60.2 defines malfunction as, "any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions." Malfunction is similarly defined in 6 NYCRR Part 201-2 as, "any sudden and unavoidable failure of an air cleaning device or air contamination source to operate in compliance with all applicable parts of this Chapter [6 NYCRR Part 201], and shall not include failures that are caused entirely or partially by poor maintenance, careless operation, or other preventable condition."

Emergency Conditions: 6 NYCRR Part 201-2(b)(12) defines emergency as, "any situation arising from suddenly and reasonably unforeseeable events beyond the control of the owner and/or operator of a facility, including acts of God, which situation requires immediate corrective action to restore normal operation and which causes the emission source to exceed a technology-based requirement under the permit of state-established emission limitations, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error."

Process: MS3 is located at Building 1 - Three 330 tons per day (reference waste of 6000 Btu/lb) municipal waste combustors, firing Solid Waste (SW). SW includes: Municipal Solid Waste (which includes residential, commercial and institutional and/or governmental waste); combustible portion of construction and demolition (C&D) debris; light industrial waste; treated regulated medical waste; treated and destroyed medical waste; and NYSDEC approved non-hazardous industrial waste streams.

Natural gas is used as an auxiliary fuel during startup, shutdown and malfunctions as described below and at other times when the minimum combustion zone temperature would not otherwise be met.

40 CFR 60.58a(a)(1) reads, "the startup period commences when the affected facility begins the continuous burning of MSW and does not include any warmup period when the affected facility is combusting only a fossil fuel or other non-MSW fuel and no MSW is being combusted."

The OCRRF facility is subject to 40 CFR 60.58a which regulates certain compliance and performance testing requirements at the OCRRF including startup, shutdown and malfunction relief. 40 CFR 60.58a(a) reads, "the standards under this subpart apply at all times except during periods of startup, shutdown or malfunction; provided however that the duration of startup, shutdown and malfunction shall not exceed three hours per occurrence." The standards regulated under this subpart, for which the



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regulations provide startup, shutdown or malfunction relief, are particulate matter, opacity, sulfur dioxide, hydrogen chloride, nitrogen oxides, carbon monoxide and baghouse inlet temperature. Furthermore, combustion index, as well as additional permit limits for the constituents listed above, are afforded the same relief. Combustion index is based on the carbon monoxide measurement ($CI = CO_2 * 100 / (CO_2 + CO)$) and addresses the same principal as the carbon monoxide permit limit, i.e. requiring a certain combustion efficiency.

The definition of malfunction relief pursuant to 40 CFR 60.58a(a) as discussed above, as well as malfunction relief for additional regulated parameters from NYSDEC on a case by case basis pursuant to 6 NYCRR Part 201-1.4 applies to the OCRRF. The definition of emergency defense pursuant to 6 NYCRR Part 201-1.5 also applies to the OCRRF.

Startup, shutdown and malfunction relief would apply in those relatively few instances in which emissions limits developed for steady state operation can not be maintained due to these relatively brief transitional periods. Emergency defense would apply in rare instances in which emission limits developed for steady-state operation can not be maintained due to an emergency as defined in 6 NYCRR Part 201-2(b)(12).

The following definitions will be used to identify the mode of operation of the MWC.

Warm-up: Natural gas is the fuel used during the warm-up period at the OCRRF. The OCRRF is in the warm-up stage when only fossil fuel is being fired in order to warm the unit up to minimum combustion zone temperatures, or to keep the unit warm, before MSW feeding has commenced.

Start-up: As indicated in the facility's approved O&M Manual, startup is initiated at the OCRRF when a boiler's feedchute damper is opened and continuous burning of MSW is commenced.

Continuous Burning: 40 CFR 60.58(a)(2) defines continuous burning as, "the continuous, semi-continuous, or batch feeding of MSW for the purposes of waste disposal, energy production, or providing heat to the combustion system in preparation for waste disposal or energy production. The use of MSW solely to provide thermal protection of the grate or hearth during the start-up period shall not be considered to be continuous burning."

Shutdown: The shutdown period for a boiler begins when the continuous burning of MSW is ceased and the shutdown period ends when refuse is burned off the grates. As indicated in the OCRRF's approved O&M Manual, the shutdown period at the OCRRF commences when the subject unit's feedchute damper is shut (this is the time at which continuous feeding is ceased). Shutdown of a unit is complete when solid waste is burned off the grates. The operator verifies that the shutdown is complete by visually inspecting the grates to make sure the fires are out.

Malfunction: 40 CFR 60.2 defines malfunction as, "any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions." Malfunction is similarly defined in 6 NYCRR Part 201-2 as, "any sudden and unavoidable failure of an air cleaning device or air contamination source to operate in compliance with all applicable parts of this Chapter [6 NYCRR Part 201], and shall not include failures that are caused entirely or partially by poor maintenance, careless operation, or other preventable condition."

Emergency Conditions: 6 NYCRR Part 201-2(b)(12) defines emergency as, "any situation arising from suddenly and reasonably unforeseeable events beyond the control of the owner and/or operator of a facility, including acts of God, which situation requires immediate corrective action to restore normal operation and which causes the emission source to exceed a technology-based requirement under the



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permit of state-established emission limitations, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error."

Process: ST1 is located at Building 1 - One of three 330 tons per day (reference waste of 6000 Btu/lb) municipal waste combustors, firing natural gas during periods of startup, shutdown and malfunction as these terms are described below, and as otherwise needed to meet temperature requirements.

The startup period commences when the affected facility begins the continuous burning of SW and does not include any warmup period when the affected facility is combusting only auxiliary fuel or other non-SW fuel and no SW is being combusted. 40 CFR 60.58(a) reads: "The standards under this subpart apply at all times except during periods of startup, shutdown or malfunction, provided however that the duration of startup, shutdown and malfunction shall not exceed three hours per occurrence." The standards regulated under this subpart, for which the regulations provide startup, shutdown or malfunction relief, are particulate matter, opacity, sulfur dioxide, hydrogen chloride, nitrogen oxides, carbon monoxide and baghouse inlet temperature. Furthermore, combustion index, as well as additional permit limits for the constituents listed above, are afforded the same relief. Combustion index is based on the carbon monoxide measurement ($CI = CO_2 * 100 / CO_2 + CO$) and addresses the same principal as the carbon monoxide permit limit, ie. requiring a certain combustion efficiency. The definition of malfunction relief pursuant to 40 CFR 60.58A(a) as discussed above, as well as malfunction relief for additional regulated parameters from NYSDEC on a case by case basis pursuant to 6 NYCRR Part 201-1.4 applies to the OCRRF. The definition of emergency defense pursuant to 6 NYCRR Part 201-1.5 also applies to the OCRRF. Startup, shutdown and malfunction relief would apply in those relatively few instances in which emissions limits developed for steady state operation can not be maintained due to these relatively brief transitional periods. Emergency defense would apply in rare instances in which emission limits developed for steady-state operation can not be maintained due to an emergency as defined in 6 NYCRR Part 201-2(b)(12).

The following definitions will be used to identify the mode of operation of the MWC.

Warmup: natural gas is the fuel used during the warmup period at the OCRRF. The OCRRF is in the warmup stage when only auxiliary fuel is being fired in order to warm the unit up to minimum combustion zone temperatures, or to keep the unit warm, before SW feeding has commenced.

Startup: Startup is initiated at the OCRRF when a boiler's feedchute damper is opened and continuous burning of MSD is commenced. **Continuous Burning:** Consistent with 40 CFR 60, Subpart Ea and Cb, continuous burning is "The continuous, semi-continuous, or batch feeding of SW for purposes of waste disposal, energy production, or providing heat to the combustion system in preparation for waste disposal or energy production. The use of SW solely to provide thermal protection of the grate or hearth during the startup period shall not be considered to be continuous burning.

Shutdown: The shutdown period for a boiler begins when the continuous burning of SW is ceased and the shutdown period ends when SW is burned off the grates. The shutdown period at the OCRRF commences when the subject unit's feedchute damper is shut (this is the same time at which continuous feeding is ceased). Shutdown of a unit is complete when SW is burned off the grates. The operator verifies that the shutdown is complete by visually inspecting the grates to make sure that the fires are out.

Malfunction: 40 CFR 60.2 defines malfunction as "any sudden, infrequent and not reasonably preventable failure of air pollution control equipment or a process to operate in a normal and usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions." Malfunction is similarly defined in 6 NYCRR Part 201-2 as "any sudden and unavoidable failure of an air cleaning device or air contamination source to operate in compliance with all applicable parts of this chapter (6 NYCRR Part 201) and shall not include failures that are caused entirely or partially by poor maintenance,



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careless operation, or other preventable condition."

Emergency Conditions: 6 NYCRR Part 201-2(b)(12) defines emergency as "any situation arising from suddenly and reasonably unforeseeable events beyond the control of the owner and/or operator of a facility, including Acts of God, which situation requires immediate corrective action to restore normal operation and which causes the emission source to exceed a technology based requirement under the permit of State-established emission limitations, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error."

Process: ST2 is located at Building 1 - One of three 330 tons per day (reference waste of 6000 Btu/lb) municipal waste combustors, firing natural gas during periods of startup, shutdown and malfunction as these terms are described below, and as otherwise needed to meet temperature requirements.

The startup period commences when the affected facility begins the continuous burning of SW and does not include any warmup period when the affected facility is combusting only auxiliary fuel or other non-SW fuel and no SW is being combusted. 40 CFR 60.58(a) reads: "The standards under this subpart apply at all times except during periods of startup, shutdown or malfunction, provided however that the duration of startup, shutdown and malfunction shall not exceed three hours per occurrence." The standards regulated under this subpart, for which the regulations provide startup, shutdown or malfunction relief, are particulate matter, opacity, sulfur dioxide, hydrogen chloride, nitrogen oxides, carbon monoxide and baghouse inlet temperature. Furthermore, combustion index, as well as additional permit limits for the constituents listed above, are afforded the same relief. Combustion index is based on the carbon monoxide measurement ($CI = CO_2 * 100 / CO_2 + CO$) and addresses the same principal as the carbon monoxide permit limit, ie. requiring a certain combustion efficiency. The definition of malfunction relief pursuant to 40 CFR 60.58A(a) as discussed above, as well as malfunction relief for additional regulated parameters from NYSDEC on a case by case basis pursuant to 6 NYCRR Part 201-1.4 applies to the OCRRF. The definition of emergency defense pursuant to 6 NYCRR Part 201-1.5 also applies to the OCRRF. Startup, shutdown and malfunction relief would apply in those relatively few instances in which emissions limits developed for steady state operation can not be maintained due to these relatively brief transitional periods. Emergency defense would apply in rare instances in which emission limits developed for steady-state operation can not be maintained due to an emergency as defined in 6 NYCRR Part 201-2(b)(12).

The following definitions will be used to identify the mode of operation of the MWC.

Warmup: natural gas is the fuel used during the warmup period at the OCRRF. The OCRRF is in the warmup stage when only auxiliary fuel is being fired in order to warm the unit up to minimum combustion zone temperatures, or to keep the unit warm, before SW feeding has commenced.

Startup: Startup is initiated at the OCRRF when a boiler's feedchute damper is opened and continuous burning of MSD is commenced. Continuous Burning: Consistent with 40 CFR 60, Subpart Ea and Cb, continuous burning is "The continuous, semi-continuous, or batch feeding of SW for purposes of waste disposal, energy production, or providing heat to the combustion system in preparation for waste disposal or energy production. The use of SW solely to provide thermal protection of the grate or hearth during the startup period shall not be considered to be continuous burning.

Shutdown: The shutdown period for a boiler begins when the continuous burning of SW is ceased and the shutdown period ends when SW is burned off the grates. The shutdown period at the OCRRF commences when the subject unit's feedchute damper is shut (this is the same time at which continuous feeding is ceased). Shutdown of a unit is complete when SW is burned off the grates. The operator verifies that the shutdown is complete by visually inspecting the grates to make sure that the fires are out.



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Malfunction: 40 CFR 60.2 defines malfunction as "any sudden, infrequent and not reasonably preventable failure of air pollution control equipment or a process to operate in a normal and usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions." Malfunction is similarly defined in 6 NYCRR Part 201-2 as "any sudden and unavoidable failure of an air cleaning device or air contamination source to operate in compliance with all applicable parts of this chapter (6 NYCRR Part 201) and shall not include failures that are caused entirely or partially by poor maintenance, careless operation, or other preventable condition."

Emergency Conditions: 6 NYCRR Part 201-2(b)(12) defines emergency as "any situation arising from suddenly and reasonably unforeseeable events beyond the control of the owner and/or operator of a facility, including Acts of God, which situation requires immediate corrective action to restore normal operation and which causes the emission source to exceed a technology based requirement under the permit of State-established emission limitations, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error."

Process: ST3 is located at Building 1 - One of three 330 tons per day (reference waste of 6000 Btu/lb) municipal waste combustors, firing natural gas during periods of startup, shutdown and malfunction as these terms are described below, and as otherwise needed to meet temperature requirements.

The startup period commences when the affected facility begins the continuous burning of SW and does not include any warmup period when the affected facility is combusting only auxiliary fuel or other non-SW fuel and no SW is being combusted. 40 CFR 60.58(a) reads: "The standards under this subpart apply at all times except during periods of startup, shutdown or malfunction, provided however that the duration of startup, shutdown and malfunction shall not exceed three hours per occurrence." The standards regulated under this subpart, for which the regulations provide startup, shutdown or malfunction relief, are particulate matter, opacity, sulfur dioxide, hydrogen chloride, nitrogen oxides, carbon monoxide and baghouse inlet temperature. Furthermore, combustion index, as well as additional permit limits for the constituents listed above, are afforded the same relief. Combustion index is based on the carbon monoxide measurement ($CI = CO_2 * 100 / (CO_2 + CO)$) and addresses the same principal as the carbon monoxide permit limit, ie. requiring a certain combustion efficiency. The definition of malfunction relief pursuant to 40 CFR 60.58A(a) as discussed above, as well as malfunction relief for additional regulated parameters from NYSDEC on a case by case basis pursuant to 6 NYCRR Part 201-1.4 applies to the OCRRF. The definition of emergency defense pursuant to 6 NYCRR Part 201-1.5 also applies to the OCRRF. Startup, shutdown and malfunction relief would apply in those relatively few instances in which emissions limits developed for steady state operation can not be maintained due to these relatively brief transitional periods. Emergency defense would apply in rare instances in which emission limits developed for steady-state operation can not be maintained due to an emergency as defined in 6 NYCRR Part 201-2(b)(12).

The following definitions will be used to identify the mode of operation of the MWC.

Warmup: natural gas is the fuel used during the warmup period at the OCRRF. The OCRRF is in the warmup stage when only auxiliary fuel is being fired in order to warm the unit up to minimum combustion zone temperatures, or to keep the unit warm, before SW feeding has commenced.

Startup: Startup is initiated at the OCRRF when a boiler's feedchute damper is opened and continuous burning of MSD is commenced. Continuous Burning: Consistent with 40 CFR 60, Subpart Ea and Cb, continuous burning is "The continuous, semi-continuous, or batch feeding of SW for purposes of waste disposal, energy production, or providing heat to the combustion system in preparation for waste disposal or energy production. The use of SW solely to provide thermal protection of the grate or hearth during the startup period shall not be considered to be continuous burning.



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Shutdown: The shutdown period for a boiler begins when the continuous burning of SW is ceased and the shutdown period ends when SW is burned off the grates. The shutdown period at the OCRRF commences when the subject unit's feedchute damper is shut (this is the same time at which continuous feeding is ceased). Shutdown of a unit is complete when SW is burned off the grates. The operator verifies that the shutdown is complete by visually inspecting the grates to make sure that the fires are out.

Malfunction: 40 CFR 60.2 defines malfunction as "any sudden, infrequent and not reasonably preventable failure of air pollution control equipment or a process to operate in a normal and usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions." Malfunction is similarly defined in 6 NYCRR Part 201-2 as "any sudden and unavoidable failure of an air cleaning device or air contamination source to operate in compliance with all applicable parts of this chapter (6 NYCRR Part 201) and shall not include failures that are caused entirely or partially by poor maintenance, careless operation, or other preventable condition."

Emergency Conditions: 6 NYCRR Part 201-2(b)(12) defines emergency as "any situation arising from suddenly and reasonably unforeseeable events beyond the control of the owner and/or operator of a facility, including Acts of God, which situation requires immediate corrective action to restore normal operation and which causes the emission source to exceed a technology based requirement under the permit of State-established emission limitations, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error."

Title V/Major Source Status

ONONDAGA CO RESOURCE RECOVERY FACILITY is subject to Title V requirements. This determination is based on the following information:

The facility is major with respect to emissions of SO₂ and NO_x and HCl.

Program Applicability

The following chart summarizes the applicability of ONONDAGA CO RESOURCE RECOVERY FACILITY with regards to the principal air pollution regulatory programs:

Regulatory Program	Applicability
PSD	YES
NSR (non-attainment)	NO
NESHAP (40 CFR Part 61)	NO
NESHAP (MACT - 40 CFR Part 63)	NO
NSPS	YES
TITLE IV	NO
TITLE V	YES
TITLE VI	NO
RACT	NO
SIP	YES



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PSD Prevention of Significant Deterioration (40 CFR 52) - requirements which pertain to major stationary sources located in areas which are in attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

NSR New Source Review (6 NYCRR Part 231) - requirements which pertain to major stationary sources located in areas which are in non-attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

NESHAP National Emission Standards for Hazardous Air Pollutants (40 CFR 61) - contaminant and source specific emission standards established prior to the Clean Air Act Amendments of 1990 (CAAA) which were developed for 9 air contaminants (inorganic arsenic, radon, benzene, vinyl chloride, asbestos, mercury, beryllium, radionuclides, and volatile HAP's).

MACT Maximum Achievable Control Technology (40 CFR 63) - contaminant and source specific emission standards established by the 1990 CAAA. Under Section 112 of the CAAA, the US EPA is required to develop and promulgate emissions standards for new and existing sources. The standards are to be based on the best demonstrated control technology and practices in the regulated industry, otherwise known as MACT. The corresponding regulations apply to specific source types and contaminants.

NSPS New Source Performance Standards (40 CFR 60) - standards of performance for specific stationary source categories developed by the US EPA under Section 111 of the CAAA. The standards apply only to those stationary sources which have been constructed or modified after the regulations have been proposed by publication in the Federal Register and only to the specific contaminant(s) listed in the regulation.

Title IV Acid Rain Control Program (40 CFR 72 thru 78) - regulations which mandate the implementation of the acid rain control program for large stationary combustion facilities.

Title VI Stratospheric Ozone Protection (40 CFR 82, Subparts A thru G) - federal requirements that apply to sources which use a minimum quantity of CFC's (chlorofluorocarbons), HCFC's (hydrofluorocarbons) or other ozone depleting substances or regulated substitute substances in equipment such as air conditioners, refrigeration equipment or motor vehicle air conditioners or appliances.

RACT Reasonably Available Control Technology (6 NYCRR Parts 212.10, 226, 227-2, 228, 229, 230, 232, 233, 234, 235, 236) - the lowest emission limit that a specific source is capable of meeting by application of control technology that is reasonably available, considering technological and economic feasibility. RACT is a control strategy used to limit emissions of VOC's and NOx for the purpose of attaining the air quality standard for ozone. The term as it is used in the above table refers to those state air pollution control regulations which specifically regulate VOC and NOx emissions.

SIP State Implementation Plan (40 CFR 52, Subpart HH) - as per the CAAA, all states are empowered and required to devise the specific combination of controls that, when implemented, will bring about attainment of ambient air quality standards established by the federal government and the individual state. This specific combination of measures is referred to as the SIP. The term here refers to those state regulations that are approved to be included in the SIP and thus are considered federally enforceable.

Compliance Status



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Facility is in compliance with all requirements.

SIC Codes

SIC or Standard Industrial Classification code is an industrial code developed by the federal Office of Management and Budget for use, among other things, in the classification of establishments by the type of activity in which they are engaged. Each operating establishment is assigned an industry code on the basis

of its primary activity, which is determined by its principal product or group of products produced or distributed, or services rendered. Larger facilities typically have more than one SIC code.

SIC Code

Description

4953

REFUSE SYSTEMS

SCC Codes

SCC or Source Classification Code is a code developed and used" by the USEPA to categorize processes which result in air emissions for the purpose of assessing emission factor information.Each SCC represents

a unique process or function within a source category logically associated with a point of air pollution emissions. Any operation that causes air pollution can be represented by one or more SCC's.

SCC Code

Description

5-01-001-04

SOLID WASTE DISPOSAL - GOVERNMENT
SOLID WASTE DISPOSAL: GOVERNMENT -
MUNICIPAL INCINERATION
SOL WST DISPOSAL-GOV:INCINERATION:MASS BURN
REFRACTORYWALLCOMBUSTOR

5-01-900-06

SOLID WASTE DISPOSAL - GOVERNMENT
SOLID WASTE DISPOSAL: GOVERNMENT -
AUXILIARY FUEL / NO EMISSIONS
Natural Gas

Facility Emissions Summary

In the following table, the CAS No. or Chemical Abstract Service code is an identifier assigned to every chemical compound. [NOTE: Certain CAS No.'s contain a 'NY' designation within them. These are not true CAS No.'s but rather an identification which has been developed by the department to identify groups of contaminants which ordinary CAS No.'s do not do. As an example, volatile organic compounds or VOC's are identified collectively by the NY CAS No. 0NY998-00-0.] The PTE refers to the Potential to Emit. This is defined as the maximum capacity of a facility or air contaminant source to emit any air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or air contamination source to emit any air contaminant, including air pollution control equipment and/or restrictions on the hours of operation, or on the type or amount or material combusted, stored, or processed, shall be treated as part of the design only if the limitation is contained in federally enforceable permit conditions. The PTE Range represents an emission range for a contaminant. Any PTE quantity that is displayed represents a facility-wide emission cap or limitation for that contaminant. If no PTE quantity is displayed, the PTE Range is provided to indicate the approximate magnitude of facility-wide emissions for the specified contaminant in terms of tons per year (tpy). The term 'HAP' refers to any of the hazardous air pollutants listed in section 112(b) of the Clean Air Act Amendments of 1990. Total emissions of all hazardous air pollutants are listed under the special NY CAS No. 0NY100-00-0. In addition, each individual hazardous air pollutant is also listed under its own

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specific CAS No. and is identified in the list below by the (HAP) designation.

Cas No.	Contaminant Name	PTE	
		lbs/yr	Range
051207-31-9	2,3,7,8-TETRACHLORODIBENZOFURAN		> 0 but < 2.5 tpy
001746-01-6	2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN		> 0 but < 10 tpy
007664-41-7	AMMONIA		>= 50 tpy but < 100 tpy
007440-36-0	ANTIMONY		> 0 but < 10 tpy
007440-38-2	ARSENIC		> 0 but < 10 tpy
000071-43-2	BENZENE		> 0 but < 10 tpy
007440-41-7	BERYLLIUM		> 0 but < 10 tpy
007440-43-9	CADMIUM		> 0 but < 10 tpy
000630-08-0	CARBON MONOXIDE	190000	
007440-47-3	CHROMIUM		> 0 but < 10 tpy
018540-29-9	CHROMIUM (VI)		> 0 but < 10 tpy
007440-48-4	COBALT		> 0 but < 10 tpy
007440-50-8	COPPER		> 0 but < 2.5 tpy
016984-48-8	FLUORIDE		> 0 but < 2.5 tpy
000050-00-0	FORMALDEHYDE		>= 10 tpy
0NY100-00-0	HAP		>= 100 tpy but < 250 tpy
007647-01-0	HYDROGEN CHLORIDE		>= 10 tpy
007439-92-1	LEAD		> 0 but < 10 tpy
007439-96-5	MANGANESE		> 0 but < 10 tpy
007439-97-6	MERCURY		> 0 but < 10 tpy
007440-02-0	NICKEL METAL AND INSOLUBLE COMPOUNDS		> 0 but < 10 tpy
0NY210-00-0	OXIDES OF NITROGEN		>= 250 tpy but < 75,000 tpy
0NY075-00-0	PARTICULATES		>= 40 tpy but < 50 tpy
0NY075-00-5	PM-10		>= 40 tpy but < 50 tpy
001336-36-3	POLYCHLORINATED BIPHENYL		> 0 but < 10 tpy
130498-29-2	POLYCYCLIC AROMATIC HYDROCARBONS		> 0 but < 10 tpy
007782-49-2	SELENIUM		> 0 but < 10 tpy
007446-09-5	SULFUR DIOXIDE		>= 100 tpy but < 250 tpy
007664-93-9	SULFURIC ACID		>= 25 tpy but < 40 tpy
007440-31-5	TIN		> 0 but < 2.5 tpy
007440-62-2	VANADIUM		> 0 but < 2.5 tpy
0NY998-00-0	VOC		>= 25 tpy but < 40 tpy
007440-66-6	ZINC		> 0 but < 2.5 tpy

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

Item A: Emergency Defense - 6 NYCRR 201-1.5

An emergency constitutes an affirmative defense to an action brought for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

(a) The affirmative defense of emergency shall be demonstrated through properly signed,

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contemporaneous operating logs, or other relevant evidence that:

- (1) An emergency occurred and that the facility owner and/or operator can identify the cause(s) of the emergency;
 - (2) The equipment at the permitted facility causing the emergency was at the time being properly operated;
 - (3) During the period of the emergency the facility owner and/or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
 - (4) The facility owner and/or operator notified the Department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- (b) In any enforcement proceeding, the facility owner and/or operator seeking to establish the occurrence of an emergency has the burden of proof.
- (c) This provision is in addition to any emergency or upset provision contained in any applicable requirement.

Item B: Public Access to Recordkeeping for Title V Facilities - 6 NYCRR 201-1.10(b)

The Department will make available to the public any permit application, compliance plan, permit, and monitoring and compliance certification report pursuant to Section 503(e) of the Act, except for information entitled to confidential treatment pursuant to 6 NYCRR Part 616 - Public Access to records and Section 114(c) of the Act.

Item C: Timely Application for the Renewal of Title V Permits -6 NYCRR Part 201-6.3(a)(4)

Owners and/or operators of facilities having an issued Title V permit shall submit a complete application at least 180 days, but not more than eighteen months, prior to the date of permit expiration for permit renewal purposes.

Item D: Certification by a Responsible Official - 6 NYCRR Part 201-6.3(d)(12)

Any application, form, report or compliance certification required to be submitted pursuant to the federally enforceable portions of this permit shall contain a certification of truth, accuracy and completeness by a responsible official. This certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Item E: Requirement to Comply With All Conditions - 6 NYCRR Part 201-6.5(a)(2)

The permittee must comply with all conditions of the Title V facility permit. Any permit non-compliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

Item F: Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR Part 201-6.5(a)(3)

This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.



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Item G: Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR 201-6.5(a)(5)

It shall not be a defense for a permittee in an enforcement action to claim that a cessation or reduction in the permitted activity would have been necessary in order to maintain compliance with the conditions of this permit.

Item H: Property Rights - 6 NYCRR 201-6.5(a)(6)

This permit does not convey any property rights of any sort or any exclusive privilege.

Item I: Severability - 6 NYCRR Part 201-6.5(a)(9)

If any provisions, parts or conditions of this permit are found to be invalid or are the subject of a challenge, the remainder of this permit shall continue to be valid.

Item J: Permit Shield - 6 NYCRR Part 201-6.5(g)

All permittees granted a Title V facility permit shall be covered under the protection of a permit shield, except as provided under 6 NYCRR Subpart 201-6. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that such applicable requirements are included and are specifically identified in the permit, or the Department, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the major stationary source, and the permit includes the determination or a concise summary thereof. Nothing herein shall preclude the Department from revising or revoking the permit pursuant to 6 NYCRR Part 621 or from exercising its summary abatement authority. Nothing in this permit shall alter or affect the following:

- i. The ability of the Department to seek to bring suit on behalf of the State of New York, or the Administrator to seek to bring suit on behalf of the United States, to immediately restrain any person causing or contributing to pollution presenting an imminent and substantial endangerment to public health, welfare or the environment to stop the emission of air pollutants causing or contributing to such pollution;
- ii. The liability of a permittee of the Title V facility for any violation of applicable requirements prior to or at the time of permit issuance;
- iii. The applicable requirements of Title IV of the Act;
- iv. The ability of the Department or the Administrator to obtain information from the permittee concerning the ability to enter, inspect and monitor the facility.

Item K: Reopening for Cause - 6 NYCRR Part 201-6.5(i)

This Title V permit shall be reopened and revised under any of the following circumstances:

- i. If additional applicable requirements under the Act become applicable where this permit's remaining term is three or more years, a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the Department pursuant to the provisions of Part 201-6.7 and Part 621.



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ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

iii. The Department or the Administrator determines that the Title V permit must be revised or reopened to assure compliance with applicable requirements.

iv. If the permitted facility is an "affected source" subject to the requirements of Title IV of the Act, and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

Proceedings to reopen and issue Title V facility permits shall follow the same procedures as apply to initial permit issuance but shall affect only those parts of the permit for which cause to reopen exists.

Reopenings shall not be initiated before a notice of such intent is provided to the facility by the Department at least thirty days in advance of the date that the permit is to be reopened, except that the Department may provide a shorter time period in the case of an emergency.

Item L: Permit Exclusion - ECL 19-0305

The issuance of this permit by the Department and the receipt thereof by the Applicant does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant for violations based on facts and circumstances alleged to have occurred or existed prior to the effective date of this permit, including, but not limited to, any enforcement action authorized pursuant to the provisions of applicable federal law, the Environmental Conservation Law of the State of New York (ECL) and Chapter III of the Official Compilation of the Codes, Rules and Regulations of the State of New York (NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.

Item M: Federally Enforceable Requirements - 40 CFR 70.6(b)

All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state regulations.

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

**Item A: General Provisions for State Enforceable Permit Terms and Condition - 6
NYCRR Part 201-5**

Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all

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criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

Regulatory Analysis

Location Facility/EU/EP/Process/ES	Regulation	Condition	Short Description
-- FACILITY	ECL 19-0301	71	Powers and Duties of the Department with respect to air pollution control
FACILITY	40CFR 52-A.21	26, 27, 28	Prevention of Significant Deterioration
FACILITY	40CFR 52-A.21 (j) (2)	29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51	Best Available Control Technology (BACT) (see narrative)
1- MBMWF/00001/MS1/00MWF	40CFR 60-Cb.33b (a) (2) (i)	63	Existing Large MWC's - emission limit for cadmium
1- MBMWF/00001/MS1/00MWF	40CFR 60-Cb.33b (a) (3)	64	Existing Large MWC's - emission limit for mercury
1- MBMWF/00001/MS1/00MWF	40CFR 60-Cb.33b (a) (4)	65	Existing Large MWC's - emission limit for lead
1- MBMWF/00001/MS1/00MWF	40CFR 60-Cb.33b (c) (1) (i)	62	Existing Large MWC's - emission limit for dioxin/furan not utilizing an electrostatic precipitator
1- MBMWF/00001/MS1/00MWF	40CFR 60-Cb.34b (a)	66	Existing Large MWC's - operating practices carbon monoxide limit
1- MBMWF/00001/MS1/00MWF	40CFR 60-Cb.34b (b)	67, 68	Existing Large MWC's - operating practices MWC temperature requirements and unit load level
1- MBMWF/00001/MS1/00MWF	40CFR 60-Cb.35b	69, 70	Municipal waste combustor operator training and certification.
FACILITY	40CFR 60-Cb.36b	52	Emission guidelines for municipal waste combustor futitive ash emissions.



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FACILITY	40CFR 60-Cb.38b	53	Compliance and performance testing.
FACILITY	40CFR 60-Cb.39b	54	Reporting and record keeping guidelines and compliance schedules.
FACILITY	40CFR 60-Cb.39b (a)	55	
FACILITY	40CFR 60-Ea.52a (b)	56	Standards for municipal waste combustor metals
FACILITY	40CFR 60-Ea.54a (d)	57	Standards for municipal waste combustor acid gases.
FACILITY	40CFR 60-Ea.56a (f)	58	Standards for municipal waste combustor operating practices
FACILITY	40CFR 60-Ea.56a (g)	59	Standards for municipal waste combustor operating practices
FACILITY	40CFR 68	20	Chemical accident prevention provisions
FACILITY	40CFR 82-F	21	Protection of Stratospheric Ozone - recycling and emissions reduction
FACILITY	6NYCRR 200.6	1	Acceptable ambient air quality.
FACILITY	6NYCRR 200.7	10, 22, 23	Maintenance of equipment.
FACILITY	6NYCRR 201-1.4	72	Unavoidable noncompliance and violations
FACILITY	6NYCRR 201-1.7	11	Recycling and Salvage
FACILITY	6NYCRR 201-1.8	12	Prohibition of reintroduction of collected contaminants to the air
FACILITY	6NYCRR 201-3.2 (a)	13	Exempt Activities - Proof of eligibility
FACILITY	6NYCRR 201-3.3 (a)	14	Trivial Activities - proof of eligibility
FACILITY	6NYCRR 201-6	24, 60, 61	Title V Permits and the Associated Permit Conditions
FACILITY	6NYCRR 201-6.5 (a) (4)	15	General conditions
FACILITY	6NYCRR 201-6.5 (a) (7)	2	General conditions
FACILITY	6NYCRR 201-6.5 (a) (8)	16	Fees
FACILITY	6NYCRR 201-6.5 (c)	3	General conditions
FACILITY	6NYCRR 201-6.5 (c) (2)	4	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.5 (c) (3) (ii)	5	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.5 (d) (5)	17	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring



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FACILITY	6NYCRR 201-6.5 (e)	6	Compliance Certification
FACILITY	6NYCRR 201-6.5 (f) (6)	18	Off Permit Changes
FACILITY	6NYCRR 202-1.1	19	Required emissions tests.
FACILITY	6NYCRR 202-2.1	7	Emission Statements - Applicability
FACILITY	6NYCRR 202-2.5	8	Emission Statements - record keeping requirements.
FACILITY	6NYCRR 211.1	25	General Prohibitions - air pollution prohibited
FACILITY	6NYCRR 211.2	73	General Prohibitions - visible emissions limited.
FACILITY	6NYCRR 215.2	9	Open Fires - Prohibitions
FACILITY	6NYCRR 219-2.2 (d)	74	Dioxin Emissions
FACILITY	6NYCRR 219-2.2 (g)	75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86	Municipal and Private Solid Waste Incineration Facilities - Operating requirements.
FACILITY	6NYCRR 219-2.4 (a) (1)	87, 88	Operating requirements.
FACILITY	6NYCRR 219-2.4 (b)	89	Operating requirements.
1-MBWWF	6NYCRR 219-2.5	91	Start-up, shutdown and upset conditions.
1-MBWWF	6NYCRR 219-2.7	92	Continuous emission monitoring.
FACILITY	6NYCRR 219-2.7 (e)	90	Continuous emission monitoring.
1-MBWWF/00001/MS1/00MWF	6NYCRR 219-7.2	93, 94	Compliance with mercury emission limitations

Applicability Discussion:

Mandatory Requirements: The following facility-wide regulations are included in all Title V permits:

ECL 19-0301

This section of the Environmental Conservation Law establishes the powers and duties assigned to the Department with regard to administering the air pollution control program for New York State.

6 NYCRR 200.6

Acceptable ambient air quality - prohibits contravention of ambient air quality standards without mitigating measures

6 NYCRR 200.7

Anyone owning or operating an air contamination source which is equipped with an emission control device must operate the control consistent with ordinary and necessary practices, standards and procedures, as per manufacturer's specifications and keep it in a satisfactory state of maintenance and repair so that it operates effectively

6 NYCRR 201-1.4

This regulation specifies the actions and recordkeeping and reporting requirements for any violation of an applicable state enforceable emission standard that results from a necessary scheduled equipment maintenance, start-up, shutdown, malfunction or upset in the event that these are unavoidable.



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6 NYCRR 201-1.7

Requires the recycle and salvage of collected air contaminants where practical

6 NYCRR 201-1.8

Prohibits the reintroduction of collected air contaminants to the outside air

6 NYCRR 201-3.2 (a)

An owner and/or operator of an exempt emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains exempt emission sources or units, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

6 NYCRR 201-3.3 (a)

The owner and/or operator of a trivial emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains trivial emission sources or units subject to this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

6 NYCRR Subpart 201-6

This regulation applies to those terms and conditions which are subject to Title V permitting. It establishes the applicability criteria for Title V permits, the information to be included in all Title V permit applications as well as the permit content and terms of permit issuance. This rule also specifies the compliance, monitoring, recordkeeping, reporting, fee, and procedural requirements that need to be met to obtain a Title V permit, modify the permit and demonstrate conformity with applicable requirements as listed in the Title V permit. For permitting purposes, this rule specifies the need to identify and describe all emission units, processes and products in the permit application as well as providing the Department the authority to include this and any other information that it deems necessary to determine the compliance status of the facility.

6 NYCRR 201-6.5 (a) (4)

This mandatory requirement applies to all Title V facilities. It requires the permittee to provide information that the Department may request in writing, within a reasonable time, in order to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. The request may include copies of records required to be kept by the permit.

6 NYCRR 201-6.5 (a) (7)

This is a mandatory condition that requires the owner or operator of a facility subject to Title V requirements to pay all applicable fees associated with the emissions from their facility.

6 NYCRR 201-6.5 (a) (8)

This is a mandatory condition for all facilities subject to Title V requirements. It allows the Department to inspect the facility to determine compliance with this permit, including copying records, sampling and monitoring, as necessary.

6 NYCRR 201-6.5 (c)

This requirement specifies, in general terms, what information must be contained in any required



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compliance monitoring records and reports. This includes the date, time and place of any sampling, measurements and analyses; who performed the analyses; analytical techniques and methods used as well as any required QA/QC procedures; results of the analyses; the operating conditions at the time of sampling or measurement and the identification of any permit deviations. All such reports must also be certified by the designated responsible official of the facility.

6 NYCRR 201-6.5 (c) (2)

This requirement specifies that all compliance monitoring and recordkeeping is to be conducted according to the terms and conditions of the permit and follow all QA requirements found in applicable regulations. It also requires monitoring records and supporting information to be retained for at least 5 years from the time of sampling, measurement, report or application. Support information is defined as including all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

6 NYCRR 201-6.5 (c) (3) (ii)

This regulation specifies any reporting requirements incorporated into the permit must include provisions regarding the notification and reporting of permit deviations and incidences of noncompliance stating the probable cause of such deviations, and any corrective actions or preventive measures taken.

6 NYCRR 201-6.5 (d) (5)

This condition applies to every Title V facility subject to a compliance schedule. It requires that reports, detailing the status of progress on achieving compliance with emission standards, be submitted semiannually.

6 NYCRR 201-6.5 (e)

Sets forth the general requirements for compliance certification content; specifies an annual submittal frequency; and identifies the EPA and appropriate regional office address where the reports are to be sent.

6 NYCRR 201-6.5 (f) (6)

This condition allows changes to be made at the facility, without modifying the permit, provided the changes do not cause an emission limit contained in this permit to be exceeded. The owner or operator of the facility must notify the Department of the change. It is applicable to all Title V permits which may be subject to an off permit change.

6 NYCRR 202-1.1

This regulation allows the department the discretion to require an emission test for the purpose of determining compliance. Furthermore, the cost of the test, including the preparation of the report are to be borne by the owner/operator of the source.

6 NYCRR 202-2.1

Requires that emission statements shall be submitted on or before April 15th each year for emissions of the previous calENDar year.

6 NYCRR 202-2.5

This rule specifies that each facility required to submit an emission statement must retain a copy of the statement and supporting documentation for at least 5 years and must make the information available to department representatives.

6 NYCRR 211.2

This regulation limits opacity from sources to less than or equal to 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.



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6 NYCRR 215.2

Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

40 CFR Part 68

This Part lists the regulated substances and their applicability thresholds and sets the requirements for stationary sources concerning the prevention of accidental releases of these substances.

40 CFR Part 82, Subpart F

Subpart F requires the reduction of emissions of class I and class II refrigerants to the lowest achievable level during the service, maintenance, repair, and disposal of appliances in accordance with section 608 of the Clean Air Act Amendments of 1990. This subpart applies to any person servicing, maintaining, or repairing appliances except for motor vehicle air conditioners. It also applies to persons disposing of appliances, including motor vehicle air conditioners, refrigerant reclaimers, appliance owners, and manufacturers of appliances and recycling and recovery equipment. Those individuals, operations, or activities affected by this rule, may be required to comply with specified disposal, recycling, or recovery practices, leak repair practices, recordkeeping and/or technician certification requirements.

Facility Specific Requirements

In addition to Title V, ONONDAGA CO RESOURCE RECOVERY FACILITY has been determined to be subject to the following regulations:

40 CFR 52.21

This citation applies to facilities that are subject to Prevention of Significant Deterioration provisions;

ie: facilities that are located in an attainment area and that emit pollutants which are listed in 40 CFR 52.21(b)(23)(i) .

40 CFR 52.21 (j) (2)

BACT determinations are made on a case-by-case basis and can be no less stringent than any requirement that exists in the current State Implementation Plan (SIP) or 40 CFR 60 and 61. Emission and operational limitations required from a BACT determination will have to be entered into the **special** permit conditions, separately by the permit reviewer.

40 CFR 60.33b (a) (2) (i)

This section sets forth the emission limit for cadmium contained in the gases discharged to the atmosphere from a municipal waste combustor subject to the requirements of the Emission Guidelines, 40 CFR 60, Subpart Cb. The emission limit for cadmium is 35 micrograms per dry standard cubic meter, corrected to 7 percent oxygen.

40 CFR 60.33b (a) (3)

This section sets forth the emission limit for mercury contained in the gases discharged to the atmosphere from a municipal waste combustor subject to the requirements of the Emission Guidelines, 40 CFR 60, Subpart Cb. The emission limit for mercury is 50 micrograms per dry standard cubic meter or 15 percent of the potential mercury emission concentration (an 85 - percent reduction by weight), corrected to 7 percent oxygen, whichever is less stringent.



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40 CFR 60.33b (a) (4)

This section sets forth the emission limit for lead contained in the gases discharged to the atmosphere from a municipal waste combustor subject to the requirements of the Emission Guidelines, 40 CFR 60, Subpart Cb. The emission limit for lead is 400 micrograms per dry standard cubic meter, corrected to 7 percent oxygen.

40 CFR 60.33b (c) (1) (iii)

This section sets forth the emission limit for dioxins/furans contained in the gases discharged to the atmosphere from a municipal waste combustor subject to the requirements of the Emission Guidelines, 40 CFR 60, Subpart Cb which does not employ an electrostatic precipitator-based emission control system. The emission limit for dioxins/furans is 30 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen

40 CFR 60.34b (a)

This section sets forth emission limits for carbon monoxide, by municipal waste combustor technology, for carbon monoxide contained in the gases discharged to the atmosphere from a municipal waste combustor subject to the requirements of the Emission Guidelines, 40 CFR 60, Subpart Cb. Limits are established as follows: 100 parts per million by volume (ppmv) for mass burn waterwall, mass burn refractory, mass burn rotary refractory, and fluidized-bed MWCs; 250 ppmv for mass burn rotary waterwall MWCs; 50 ppmv for modular starved - air and excess air MWCs; 150 ppmv mixed fuel-fired pulverized coal/refuse derived fuel (RDF) MWCs; 200 ppmv for spreader stoker mixed fuel-fired pulverized coal/RDF and RDF stoker MWCs, all corrected to 7 percent oxygen (dry basis).

40 CFR 60.34b (b)

This section sets forth municipal waste combustor operating practices which include maximum load level and temperature requirements. The operating range for the combustor must be no more than 110 percent of the maximum load level demonstrated during the most recent performance test demonstrating compliance with the applicable dioxin/furan limit. The temperature at the inlet of the particulate matter control device must be no more than 17degrees C (30.6 F) above the maximum demonstrated particulate matter control device temperature measured during the most recent dioxin/furan performance test demonstrating compliance with the applicable dioxin/furan limit.

40 CFR 60.35b

This section requires that the applicant develop and update on a yearly basis a site-specific operating manual that must, at a minimum, address the elements of municipal waste combustor unit operation specified in 40 CFR 60.54b of Subpart Eb.

In addition, a training program is required to review the operating manual with each person who has responsibilities affecting the operation of a municipal waste combustor including, but not limited to, chief facility operators, shift supervisors, control room operators, ash handlers, maintenance personnel, and crane/load handlers.

This section also requires that each chief facility operator and shift supervisor obtain and maintain a current provisional operator certification from either the American Society of Mechanical Engineers (QRO-1-1994) or from another certification program acceptable to the Department.



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40 CFR 60.36b

This section sets forth the emission limit for municipal waste combustor fugitive ash emissions. It requires that discharge to the atmosphere of visible emissions of combustion ash from the ash conveying system (including conveyor transfer points) may not exceed 5 percent of the observation period (i.e. 9 minutes per 3-hour period), as determined by EPA Reference Method 22 observations. This emission limit does not cover visible emissions discharged inside buildings or enclosures of ash conveying systems; however, it does cover visible emissions discharged to the atmosphere from buildings or enclosures of ash conveying systems. This emission limit does not apply during maintenance and repair of ash conveying systems.

40 CFR 60.38b

This section sets forth compliance and performance testing requirements for municipal waste combustors.

40 CFR 60.39b

This section sets forth reporting and recordkeeping guidelines and compliance schedules for municipal waste combustors.

40 CFR 60.39b (a)

This section requires that the applicant meet the municipal waste combustor reporting and recordkeeping provisions listed in 40 CFR 60.59b of Subpart Eb, as applicable.

40 CFR 60.52a (b)

This section sets forth the emission limit for opacity exhibited by the gases discharged to the atmosphere from a municipal waste combustor subject to the particulate matter emission limit specified in 60.52a of 40 CFR 60, Subpart Ea. The emission limit for opacity is 10 percent (6 - minute average).

40 CFR 60.54a (d)

This section sets forth the emission limit for hydrogen chloride contained in the gases discharged to the atmosphere from a municipal waste combustor meeting the applicability requirements of 40 CFR 60, Subpart Ea. The emission limit for hydrogen chloride is 25 parts per million by volume or 5 percent of the potential hydrogen chloride emission concentration (95 - percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent.

40 CFR 60.56a (f)

This section requires that the applicant develop and update on a yearly basis a site-specific operating manual. It also specifies the minimum elements of municipal waste combustor unit operation that must be included in the operating manual.

40 CFR 60.56a (g)

This section requires that the owner or operator of a municipal waste combustor meeting the applicability requirements of 40 CFR 60, Subpart Ea, establish a training program for reviewing the operating manual annually with each person who has responsibilities affecting the operation of a municipal waste combustor including, but not limited to, chief facility operators, shift supervisors, control room operators, ash handlers, maintenance personnel, and crane/load handlers.

6 NYCRR 211.1



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6 NYCRR 219-2.2 (d)

This section sets forth the emission limit for dioxins contained in the gases discharged to the atmosphere from a municipal solid waste incineration facility meeting the applicability criteria of 6 NYCRR Subpart 219-2.

A dioxin equivalent emission concentration in excess of 2 nanograms per dry standard cubic meter (ng/dscm), corrected to seven percent oxygen, is required.

This section also requires that any person who owns or operates a facility subject to Subpart 219-2 must submit, as part of an application for a permit to construct a new facility and for each application to renew a certificate to operate, a plan demonstrating to the satisfaction of the commissioner that all reasonable efforts and best management practices have been implemented to achieve reasonable progress toward minimization of dioxin equivalent emissions to a target value of 0.2 ng/dscm, corrected to seven percent oxygen.

6 NYCRR 219-2.2 (g)

In the absence of a contaminant specific emission limitation or ambient air quality standard, this requirement states that a permit should contain conditions to limit emissions in accordance with section 200.6 of this Title.

6 NYCRR 219-2.4 (a) (1)

This section establishes an operating requirement to monitor the combustion efficiency of an incinerator which meets the applicability criteria of Subpart 219-2.

A combustion index of 99.9 percent based on a running eight-hour average of readings, and 99.95 percent, based on a running seven-day average of readings is required. On a case-by-case basis, alternative combustion index criteria may be established for any source subject to the requirements of Subpart 219-2 which is demonstrated to be unable to meet the combustion index criteria. In no case may such alternative combustion index criteria be less than 99.80 percent, based on a running eight-hour average of readings.

6 NYCRR 219-2.4 (b)

This section establishes an operating requirement to monitor the temperature in the combustion zone of an incinerator which meets the applicability criteria of Subpart 219-2.

The section requires that an applicant demonstrate by a method specific to a proposed incinerator, and which is acceptable to the department, that actual measurements indicate a temperature and residence time of at least 1,800°F for one second in the combustion zone on a continuous basis, or equivalent. The demonstration must be based on a continuous 30 minute average of temperature measurements.

6 NYCRR 219-2.5

This section requires that any person who owns or operates an incinerator subject to Subpart 219-2 submit, 90 days or more prior to applying for a certificate to operate, an operating plan to provide for



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proper maintenance, and avoid careless operation or other preventable conditions during startup, shutdown and other upset condition periods. It requires that such a plan must include provisions for equipment which automatically maintains proper operating parameters. The plan must also be found acceptable to the department and approved prior to issuance of a certificate to operate.

6 NYCRR 219-2.7

This section of the NYS MSW incinerator rule contains requirements for continuous monitoring of emissions and operating parameters.

6 NYCRR 219-2.7 (e)

This section requires that any person who owns or operates an incinerator subject to Subpart 219-2, must retain for at least three years, records and summaries of all measurements and operating parameters, and make them available upon request of the department within 10 working days from receipt of the request.

6 NYCRR 219-7.2

Section 219-7.2 sets forth annual compliance requirements including stack testing procedures to demonstrate compliance with a mercury emission limitation of 28 micrograms/dscm (corrected to 7% oxygen) or 85% removal, whichever is less stringent, for each municipal waste combustor unit.

Compliance Certification

Summary of monitoring activities at ONONDAGA CO RESOURCE RECOVERY FACILITY:

Location Facility/EU/EP/Process/ES	Cond No.	Type of Monitoring

FACILITY	26	record keeping/maintenance procedures
FACILITY	27	record keeping/maintenance procedures
FACILITY	28	record keeping/maintenance procedures
FACILITY	29	intermittent emission testing
FACILITY	30	intermittent emission testing
FACILITY	31	continuous emission monitoring (cem)
FACILITY	32	intermittent emission testing
FACILITY	33	intermittent emission testing
FACILITY	34	intermittent emission testing
FACILITY	35	intermittent emission testing
FACILITY	36	continuous emission monitoring (cem)
FACILITY	37	continuous emission monitoring (cem)
FACILITY	38	intermittent emission testing
FACILITY	39	intermittent emission testing
FACILITY	40	continuous emission monitoring (cem)
FACILITY	41	intermittent emission testing
FACILITY	42	continuous emission monitoring (cem)
FACILITY	43	intermittent emission testing
FACILITY	44	continuous emission monitoring (cem)
FACILITY	45	intermittent emission testing
FACILITY	46	intermittent emission testing
FACILITY	47	continuous emission monitoring (cem)
FACILITY	48	intermittent emission testing
FACILITY	49	intermittent emission testing
FACILITY	50	intermittent emission testing
FACILITY	51	intermittent emission testing
1-MBMWF/00001/MS1/00MWF	63	intermittent emission testing
1-MBMWF/00001/MS1/00MWF	64	intermittent emission testing
1-MBMWF/00001/MS1/00MWF	65	intermittent emission testing



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1-MBMWF/00001/MS1/00MWF	62	intermittent emission testing
1-MBMWF/00001/MS1/00MWF	66	continuous emission monitoring (cem)
1-MBMWF/00001/MS1/00MWF	67	monitoring of process or control device parameters as surrogate
1-MBMWF/00001/MS1/00MWF	68	monitoring of process or control device parameters as surrogate
1-MBMWF/00001/MS1/00MWF	70	record keeping/maintenance procedures
FACILITY	52	monitoring of process or control device parameters as surrogate
FACILITY	53	record keeping/maintenance procedures
FACILITY	54	record keeping/maintenance procedures
FACILITY	55	record keeping/maintenance procedures
FACILITY	56	monitoring of process or control device parameters as surrogate
FACILITY	57	intermittent emission testing
FACILITY	22	record keeping/maintenance procedures
FACILITY	23	record keeping/maintenance procedures
FACILITY	5	record keeping/maintenance procedures
FACILITY	6	record keeping/maintenance procedures
FACILITY	7	record keeping/maintenance procedures
FACILITY	74	intermittent emission testing
FACILITY	75	intermittent emission testing
FACILITY	76	intermittent emission testing
FACILITY	77	intermittent emission testing
FACILITY	78	intermittent emission testing
FACILITY	79	intermittent emission testing
FACILITY	80	intermittent emission testing
FACILITY	81	intermittent emission testing
FACILITY	82	intermittent emission testing
FACILITY	83	intermittent emission testing
FACILITY	84	intermittent emission testing
FACILITY	85	intermittent emission testing
FACILITY	86	intermittent emission testing
FACILITY	87	monitoring of process or control device parameters as surrogate
FACILITY	88	monitoring of process or control device parameters as surrogate
FACILITY	89	monitoring of process or control device parameters as surrogate
FACILITY	90	record keeping/maintenance procedures
1-MBMWF/00001/MS1/00MWF	93	intermittent emission testing
1-MBMWF/00001/MS1/00MWF	94	intermittent emission testing

Basis for Monitoring

Onondaga County Resource Recovery Facility

Air Title V Permit Renewal - Statement of Basis

1. Applicable Requirements - The facility is subject to the following air emission regulations for large MSW combustion facilities.

Prevention of Significant Deterioration (PSD) (40 CFR 52.21) - The facility was issued a PSD construction permit in 1992 as new major source with respect to the Federal PSD rule. The requirements from the PSD permit are incorporated into the Title V permit.

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New Source Review (NSR) (6 NYCRR Part 231) - The facility accepted an annual emission limit for Carbon Monoxide (CO) emissions to avoid being subject to NSR during original permitting. At that time, the Syracuse Metropolitan area was designated non-attainment for Carbon Monoxide, and therefore any new source emitting 100 or more tons/year of CO would be subject to NSR requirements. CO emissions from the OCRRF is limited to 95 tons/year on a 365 daily rolling basis. Compliance with this requirement is demonstrated through use of CO continuous emission monitoring for each stack.

NYS MSW incinerator rule for new units (6 NYCRR Part 219-2) - This rule was in effect at the time that the original permit was issued to the OCRRF. The requirements of this rule are found in the "State enforceable requirements" section of the Title V permit.

NYS MSW incinerator rule for mercury emissions (6 NYCRR Part 219-7) - This rule took effect in 2002 and regulates mercury emissions from large MSW combustors including the OCRRF. The requirements of this rule were incorporated into the facility's Title V air permit in 2003 on the "State enforceable requirements" section of the permit.

Federal New Source Performance Standard for Large MSW combustors (40 CFR 60 Subpart Ea) - This rule regulates emissions from any new large MSW units constructed at the time the OCRRF was permitted.

Federal Emission Guideline for new and existing Large MSW combustors (40 CFR 60 Subpart Cb) - This Federal rule took effect in 1995 and established limits for existing large MSW units such as the OCRRF. The NYSDEC adopted this rule by reference in 6 NYCRR Part 200. This rule was modified in 2006 and the Department is incorporating the changes made to the rule into each individual affected facility permit to satisfy the Federal requirements. Note that this rule refers to sections of 40 CFR 60 Subpart Eb for several requirements, particularly those involving testing, monitoring, operator training/certification and reporting.

2. Regulatory Emission Limits - The following is a discussion of the permit limits found in the Title V permit and the basis for each. In general, the permit only contains the most stringent requirements that apply in situations where more than one rule regulate a given pollutant. This is purposefully done to avoid any confusion in the permit with respect to demonstrating compliance with the most stringent limits. Also note that all concentration limits are corrected to 7% O₂, or the equivalent CO₂ concentration.

Federally Enforceable Limits/Compliance Method(s)

Dioxin/Furans: 30 ng/dscm based on Federal Toxic Equivalency factors - Cb, Ea, PSD
Annual stack test, carbon and temperature limits.

Cadmium: 35 ug/dscm - Cb and 0.0019 lb/hr - PSD, Annual stack test.



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Lead: 400 Ug/dscm - Cb and 0.0381 lb/hr - PSD, Annual stack test.

Mercury: 50 ug/dscm or >85% control - Cb (this limit is more stringent than the PSD limit but less stringent than the NYS limit contained in the State enforceable requirements section)

0.004 lb/hr - PSD (original limit of 0.0182 lb/hr & 130 ug/dscm adjusted for the NYS rule reduction of the concentration limit - 28 ug/dscm).

Annual inlet/outlet mercury stack test, carbon flow rate and baghouse inlet temp limits

Particulate Matter: 0.010 gr/dscf - PSD, 25 mg/dscm - Cb, Annual stack test.

PM10: 0.010 gr/dscf, 3.16 lb/hr - PSD, Annual stack test

Opacity: 10%, 6 minute average - PSD, Cb, Ea, Continuous Opacity Monitoring

Hcl: 25 ppm or >95% control - Ea, PSD, 5.24 lb/hr - PSD, Annual stack test.

SO2: 29 ppm, 24 hour block, or >85% control - Ea (29 ppm), PSD (>85% control) Note
- The PSD concentration limit is 30 ppm (or >85% control), SO2 CEMS

Nox: 200 ppm, 3 hr rolling - PSD, NOx CEMS

180 ppm, 24 hr block - Ea, PSD, Nox CEMS

58 lb/hr - PSD, Annual stack test.

CO: 100 ppm, 4 hr block - PSD, Cb, Ea, CO CEMS

50 ppm, rolling 8 hr block - PSD, CO CEMS

45 ppm, 24 hr block - PSD, CO CEMS

8.04 lb/hr, 8 hr rolling - PSD, CO CEMS

95 tons/year, rolled daily - NSR Non applicability, CO CEMS

Flouride: 0.165 lb/hr - PSD, 5 year stack test

VOC: 30 ppm and 2.76 lb/hr - PSD, 5 year stack test

Sulfuric Acid Mist: 1.69 lb/hr - PSD, stack test by request

Arsenic: 0.00078 lb/hr - PSD, 5 year stack test

Beryllium: 0.0000115 lb/hr - PSD, 5 year stack test

State Only Enforceable Limits/Compliance Method(s) - note these compounds were tested for annually for the first 5 years of operation of the facility. This test data was used to derive the final statistical based limits below.

Dioxin/Furans: 0.4 ng/dscm and 1.29×10^{-7} lb/hr based on NYS TEQ, Annual stack test

PCBs: 0.053 ug/dscm, 5 year stack test

PAHs: 1.0 ug/dscm and 0.00014 lb/hr, 5 year stack test

Formaldehyde: 50 ug/dscm, 5 year stack test

Ammonia: 50 ppm, annual stack test

Chromium: 0.00193 lb/hr, 5 year stack test

Hexavalent Chrome: 0.0003 lb/hr, 5 year stack test

Copper: 0.004 lb/hr, 5 year stack test

Manganese: 0.023 lb/hr, 5 year stack test

Nickel: 0.004 lb/hr, 5 year stack test



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Vanadium: 0.0006 lb/hr, 5 year stack test

Zinc: 0.0188 lb/hr, 5 year stack test

3. Operating Limits.

Operating Load: units are limited to operating no more than 110% of the load operated at during most recent stack test. - Cb, Ea

Baghouse Inlet Temperature: The inlet temperature to each baghouse must be no more than 30 degrees higher than the temperature during the most recent stack test. - Cb, Ea

Boiler Roof Temperature: Boiler roof temperature must remain above the minimum temperatures (30 minute block average) established during the correlation study used to demonstrate compliance with the 1800 degrees/1 second residence time requirement. - 219-2

Combustion Index: >99.95%, 7 day rolling, >99.9%, 8 hr rolling - 219-2

Lime Flow: minimum of 275 lb/hr at full load, or flow rate from latest Hcl compliance test, whichever is greater. - to ensure compliance with PSD lb/hr limit.

Carbon Flow: equal or exceed the carbon flow rate during the most recent mercury or dioxin compliance stack test - Cb

4. Continuous Emission/Operation Monitors.

The following emissions/parameters must be continuously monitored for each unit:
Emissions: NO_x, SO_x (inlet and outlet to scrubber), Carbon Monoxide, O₂, CO₂, Opacity
Parameters: Baghouse inlet temperature, boiler roof temperature, carbon flow rate, lime flow rate, unit steam load, ammonia emissions. These monitoring systems must meet the applicable QA/QC requirements as specified in the applicable rules. In general, CEMS downtime is limited to less than 10% of the operating hours per quarter and less than 5% of the operating days per calendar year.

5. Compliance Stack Testing.

The facility is required to conduct annual compliance stack testing for several contaminants as identified in Section 2 above. These include dioxin, particulates, mercury, Hcl, cadmium, lead and ammonia. In addition, several contaminants must be tested for every five years as identified in section 2 above. Stack testing must be conducted using a Department approved test protocol. The annual stack test report must be received by the Department within 120 days of completion of testing.

6. Reports.

The facility must submit quarterly excess emission/CEMS downtime reports to the Department. In addition, the facility must submit Title V semi-annual monitoring reports



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and annual compliance reports to the Department. The facility must also submit an annual compliance report as required by 40 CFR 60 Subpart Cb.

7. Additional Requirements.

Certified Operator: There must be a certified or provisionally certified shift supervisor or chief facility operator on site during all periods of operation. Certification is done through the ASME QRO certification program. - Cb, Ea, 219-2

Facility Operating Manual: The facility must maintain and update annually a facility specific operating manual detailing several aspects of operation of the facility.

Facility Training Program: All facility personnel involved in operation of the facility must receive annual training relevant to their job duties at the plant. This includes but is not limited to chief facility operators, shift supervisors, control room operators, ash handlers, maintenance personnel, crane/load handlers.

Fugitive Ash Emissions: The presence of any visible emissions from ash handling operations at the facility are limited to less than 5% of a three hour observation period. A compliance demonstration for this is required annually.

Startup/Shutdown/Malfunctions: In the event of a failure of any APC equipment, the facility is required to stop feeding the unit with failed APC within 30 minutes of the failure (60 minutes for the carbon feed system). Excess emissions that occur during startup, shutdown or malfunction must be reported to the Department verbally within 1 business day, and followed with a written report within 3 business days.