



Facility Identification Data

Name: BROOKHAVEN LANDFILL & RECYCLING AREA
Address: 350 HORSEBLOCK RD
YAPHANK, NY 11980

Owner/Firm

Name: TOWN OF BROOKHAVEN
Address: 1 INDEPENDENCE HILL
FARMINGVILLE, NY 11738, USA
Owner Classification: Municipal

Permit Contacts

Division of Environmental Permits:
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Division of Air Resources:
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Air Permitting Contact:
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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

BROOKHAVEN LANDFILL & RECYCLING AREA is located in the town of BROOKHAVEN in the county of SUFFOLK.

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 < 10 μ in diameter (PM10)	ATTAINMENT
Sulfur Dioxide (SO ₂)	ATTAINMENT
Ozone*	SEVERE NON-ATTAINMENT
Oxides of Nitrogen (NO _x)**	ATTAINMENT
Carbon Monoxide (CO)	ATTAINMENT

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

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

Facility Description

THE FACILITY IS THE TOWN OF BROOKHAVEN LANDFILL DISPOSAL COMPLEX. HISTORICALLY, THE SITE HAS BEEN USED TO DISPOSE OF MUNICIPAL SOLID WASTE (MSW) AND CONSTRUCTION AND DEMOLITION (C&D) WASTE. CURRENTLY, MSW IS BEING TRANSFERRED AT THE SITE FOR SHIPMENT TO THE HEMPSTEAD RESOURCE RECOVERY FACILITY. ONLY C & D WASTE AND ASH THAT IS RETURNED FROM THE HEMPSTEAD FACILITY IS BEING DISPOSED IN THE LANDFILL. OTHER ACTIVITIES INCLUDE RECYCLING, SITE REMEDIATION, GAS COLLECTION, BRUSH CHIPPING AND MULCH OPERATIONS. AIR EMISSION SOURCES FROM THE BROOKHAVEN LANDFILL RECYCLING INCLUDE THE LANDFILL AREAS, FLARES USED TO COMBUST EXTRACTED LANDFILL GAS, SEMI-MOBILE BRUSH AND WOOD CHIPPING UNITS AND SEVERAL BOILERS USED FOR HEATING PURPOSES. THE BOILERS ARE EXEMPT UNDER 201-3. LANDFILL GAS GENERATED IN ALL LANDFILL CELLS IS COLLECTED AND CONTROLLED. GAS GENERATED FROM CELLS 1-4 (PRIMARILY MSW) IS DIRECTED TO THE ADJACENT BROOKHAVEN LANDFILL GAS RECOVERY FACILITY AND EMISSIONS FROM THE COMBUSTION OF THE LANDFILL GAS ARE REGULATED BY ITS OWN TITLE V PERMIT. LANDFILL GAS GENERATED IN CELLS 5 AND 6 (C&D LANDFILL) IS COLLECTED AND CONTROLLED BY FLARES. A SULFATREAT HYDROGEN SULFIDE H₂S CONTROL SYSTEM HAS BEEN INSTALLED TO REDUCE THE H₂S CONCENTRATION IN THE LANDFILL GAS EXTRACTED FROM CELLS 5 AND 6. BY REDUCING THE H₂S IN THE LANDFILL GAS PRIOR TO COMBUSTION IN THE FLARE WILL REDUCE SULFUR DIOXIDE SO₂ FROM THE SITE. THE SULFATREAT SYSTEM IS EXPECTED TO OPERATE WHEN ACTUAL FACILITY WIDE SO₂ EMISSIONS REACH 225 TONS PER YEAR, WHICH IS WITHIN 10% OF PREVENTION OF SIGNIFICANT DETERIORATION (PSD) MAJOR SOURCE THRESHOLD OF 250 TONS PER YEAR.

Permit Structure and Description of Operations

The Title V permit for BROOKHAVEN LANDFILL & RECYCLING AREA 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.

BROOKHAVEN LANDFILL & RECYCLING AREA is defined by the following emission unit(s):
 Emission unit 00CD56 - CELLS 5 & 6 ARE USED TO ACCEPT C/D AND OTHER MATERIALS AS APPROVED BY THE DEPARTMENT AT THE LANDFILL COMPLEX. FUGITIVE DUST EMISSIONS FROM LANDFILLING AND FUGITIVE LANDFILL GAS FROM DECOMPOSITION ARE RELEASED FROM THE CELL 5 & 6 AREAS. THIS IS AN AREA SOURCE. COLLECTED GAS WILL BE DIRECTED TO CONTROL SYSTEM AND FLARED OR USED FOR ENERGY PRODUCTION. EVENTUALLY WHEN LANDFILL CELL 5 & 6 ARE COMPLETE, THEY WILL BE CAPPED AND CLOSED. ONCE FACILITY WIDE SO₂ EMISSIONS ARE EXPECTED TO EXCEED 225 TPY, THE SULFA TREAT H₂S CONTROL SYSTEM WILL BE USED TO REDUCE LFG H₂S CONCENTRATIONS AND THEREFORE REDUCE LFG COMBUSTION SO₂ EMISSIONS.

It is further defined by the following process(es):

Process: C56 THE LANDFILL ACCEPTS C&D AND OTHER APPROVED DEPARTMENT DEBRIS AND ASH AT AN APPROXIMATE RATE OF 2,700 TONS PER DAY. MATERIALS ARE LANDFILLED INTO CELLS 5 AND 6.

Emission unit 0MSW14 - CELLS 1-4 OF THE LANDFILL DISPOSAL COMPLEX CONSISTING OF MUNICIPAL SOLID WASTE (MSW) AND C/D. CELLS ARE CAPPED AND INSTALLED WITH A LANDFILL GAS (LFG) COLLECTION SYSTEM, DIRECTING THE LANDFILL GAS TO THE WEHRAN ENERGY FACILITY WHERE LANDFILL GAS IS CONVERTED TO ENERGY. ANY COLLECTED GAS THAT IS NOT BEING USED FOR ENERGY WILL BE REDIRECTED TO AN ENCLOSED FLARE.

It is further defined by the following process(es):

Process: M14 CELLS 1-4 CONTAIN MUNICIPAL SOLID WASTE (MSW). LANDFILL GAS THAT IS GENERATED IS COLLECTED BY A LANDFILL GAS COLLECTION SYSTEM AND DIRECTED TO THE WEHRAN ENERGY FACILITY WHERE LANDFILL GAS IS CONVERTED TO ENERGY. ANY COLLECTED GAS THAT IS NOT BEING USED FOR ENERGY WILL BE REDIRECTED TO AN ENCLOSED FLARE. CELLS 1-4 HAVE BEEN CLOSED AND CAPPED SINCE 1996.

Emission unit EFLARE - ENCLOSED FLARE USED TO COMBUST LANDFILL GAS GENERATED IN CELLS 5 AND 6 AND IN CELLS 1-4 WHEN NOT DIRECTED TO BROOKHAVEN LANDFILL GAS RECOVERY FACILITY. LANDFILL GAS WILL BE SENT THROUGH THE SULFATREAT H₂S CONTROL SYSTEM PRIOR TO BEING FLARED WHEN NECESSARY.



Emission unit EFLARE is associated with the following emission points (EP):

EFLAR

It is further defined by the following process(es):

Process: EFLTHE LANDFILL GASES GENERATED BY CELLS 5 AND 6 WILL BE DIRECTED TO THE ENCLOSED FLARE. THE GAS CONTAINS HYDROGEN SULFIDE AND THE FLARE IS USED TO CONTROL THE ODOROUS GAS AND TO REDUCE NMOCS GENERATED BY CELLS 5 AND 6.

Emission unit PFLARE - PORTABLE FLARE TO BE USED ONLY WHEN THE ENCLOSED FLARE IS DOWN FOR REPAIRS, MAINTENANCE OR OTHER EMERGENCY CONDITIONS. SINCE THIS UNIT IS USED FOR BACK UP PURPOSES ONLY, EMISSIONS ARE NOT INCLUDED IN THE FACILITY TOTALS.

Emission unit PFLARE is associated with the following emission points (EP):

PFLAR

It is further defined by the following process(es):

Process: PFLPORTABLE FLARE IS BEING PROPOSED AND WILL BE USED WHEN THE ENCLOSED FLARE IS NOT OPERATING DUE TO REPAIRS, MAINTENANCE OR OTHER EMERGENCY CONDITIONS. DESIGN CAPACITY WILL BE 500-1500 CFM. THERE MAY ALSO BE TIMES WHEN BOTH THE ENCLOSED AND PORTABLE FLARES ARE OPERATING SIMULTANEOUSLY DURING EMERGENCY SITUATIONS. THE SIMULTANEOUS OPERATION OF FLARES WILL NOT OCCUR FOR MORE THAN 500 HOURS PER YEAR.

Emission unit WDCHPR - THIS UNIT CONSISTS OF TWO STATIONARY, INTERNAL COMBUSTION DIESEL ENGINE, WOOD CHIPPING UNITS. ONE CHIPPER HAS AN ENGINE HORSEPOWER RATING OF 1000 AND THE OTHER CHIPPER HAS AN ENGINE RATING OF 650 HORSEPOWER. THE WOOD CHIPPING UNITS ARE LOCATED EAST OF CE LLS 1-4, WHERE TREE AND BRUSH DEBRIS IS DUMPED. BOTH UNITS ARE LIMITED TO 2500 HOURS PER YEAR COMBINED.

Emission unit WDCHPR is associated with the following emission points (EP):

W0001, W0002

It is further defined by the following process(es):

Process: W01STATIONARY WOOD CHIPPING UNIT CONSISTS OF A 1000 HORSEPOWER INTERNAL COMBUSTION ENGINE. UNIT IS A MORBARK 1500 TUB GRINDER THAT CONTAINS A 1000 HP CATERPILLAR 3412E IC ENGINE.

Process: W02STATIONARY WOOD CHIPPING UNIT CONSISTING OF A 650 HORSEPOWER INTERNAL COMBUSTION ENGINE.

Emission unit LST01 - Leachate Storage Tanks No. 1 and No. 2. These tanks have a storage capacity of 860,000 gallons each. The two tanks are filled daily with the daily leachate volumes of +/- 10,000 gallons. Haulers remove quantities with the tanks serving as reservoirs for the excess. Leachate Storage Tanks store landfill leachate and treat to adjust various parameters to allow disposal via local WWTP. The working losses from filling the tanks will be controlled via a separate biofilter connected to the each tank vent.

It is further defined by the following process(es):

Process: 001Leachate Storage tanks store landfill leachate and treat leachate to adjust various parameters to allow disposal via local WWTP. The working losses from filling the tanks will be controlled via a separate biofilter connected to the each tank vent.

Title V/Major Source Status

BROOKHAVEN LANDFILL & RECYCLING AREA is subject to Title V requirements. This determination is based on the following information:

Facility is subject to Title V requirements due to emissions of Sulfur Dioxide, which exceed the 100 tons per year threshold.

Program Applicability



The following chart summarizes the applicability of BROOKHAVEN LANDFILL & RECYCLING AREA with regards to the principal air pollution regulatory programs:

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

NOTES:

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

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

4953
5541

Description

REFUSE SYSTEMS
GASOLINE SERVICE STATIONS

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

2-02-004-01

Description

INTERNAL COMBUSTION ENGINES - INDUSTRIAL
INDUSTRIAL INTERNAL COMBUSTION LARGE BORE ENGINE



5-01-004-05 Diesel
SOLID WASTE DISPOSAL - GOVERNMENT
SOLID WASTE DISPOSAL: GOVERNMENT - LANDFILL DUMP
LANDFILL: RAMP METHOD

5-01-004-10
SOLID WASTE DISPOSAL - GOVERNMENT
SOLID WASTE DISPOSAL: GOVERNMENT - LANDFILL DUMP
WASTE GAS DESTRUCTION: WASTE GAS FLARES

5-01-825-99
SOLID WASTE DISPOSAL - GOVERNMENT
SOLID WASTE DISPOSAL: GOVERNMENT - WASTEWATER, POINTS OF
GENERATION
WASTEWATER: SPECIFY POINT OF GENERATION

Facility Emissions Summary

In the following table, the CAS No. or Chemical Abstract Series 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 specific CAS No. and is identified in the list below by the (HAP) designation.

Cas No.	Contaminant Name	PTE	
		lbs/yr	Range
000630-08-0	CARBON MONOXIDE	66968.8	
0NY100-00-0	HAP	79460	
007647-01-0	HYDROGEN CHLORIDE	7600	
007783-06-4	HYDROGEN SULFIDE	1133420	
007439-92-1	LEAD	524.2	
0NY998-20-0	NMOC - LANDFILL USE ONLY	341775	
0NY210-00-0	OXIDES OF NITROGEN	42762.5	
0NY075-00-0	PARTICULATES	1136400	
0NY075-02-5	PM 2.5	528408.8	C
0NY075-00-5	PM-10	471263.1	
007446-09-5	SULFUR DIOXIDE	4657.8	
0NY998-00-0	VOC	pteyear	

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS



Item A: Emergency Defense - 6NYCRR Part 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, 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 - 6NYCRR Part 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 6NYCRR 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.

Item G: Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR Part 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 Part 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.
- 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 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		69	Powers and Duties of the Department with respect to air pollution control
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	9	
FACILITY	6NYCRR 201-1.4	70	Unavoidable noncompliance and violations
FACILITY	6NYCRR 201-1.7	10	
FACILITY	6NYCRR 201-1.8	11	Prohibition of reintroduction of collected contaminants to the air
FACILITY	6NYCRR 201-3.2 (a)	12	Exempt Activities - Proof of eligibility
FACILITY	6NYCRR 201-3.3 (a)	13	Trivial Activities - proof of eligibility
FACILITY	6NYCRR 201-6	22, 61, 62	Title V Permits and the Associated Permit Conditions
FACILITY	6NYCRR 201-6.5 (a) (4)	14	
FACILITY	6NYCRR 201-6.5 (a) (7)	2	
FACILITY	6NYCRR 201-6.5 (a) (8)	15	
FACILITY	6NYCRR 201-6.5 (c)	3	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring
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)	16	
FACILITY	6NYCRR 201-6.5 (e)	23	
FACILITY	6NYCRR 201-6.5 (f) (6)	17	
FACILITY	6NYCRR 201-7	24, 25, 63	Federally Enforceable Emissions Caps
FACILITY	6NYCRR 202-1.1	18	
FACILITY	6NYCRR 202-1.2	26	
FACILITY	6NYCRR 202-1.3	27	
FACILITY	6NYCRR 202-2.1	6	Emission Statements - Applicability
FACILITY	6NYCRR 202-2.5	7	Emission Statements - record keeping requirements.
FACILITY	6NYCRR 207.3	25	
FACILITY	6NYCRR 208.3 (b)	29	Standards of Emissions from MSW Landfills
FACILITY	6NYCRR 208.3 (b) (2) (i) ('e'	28, 30	Compliance Milestone Dates
FACILITY	6NYCRR 208.3 (b) (2) (iii) ('	31	Active Collection System - Flares
FACILITY	6NYCRR 208.3 (b) (2) (iii) ('	32	Active Collection System - Gas Treatment
FACILITY	6NYCRR 208.3 (b) (2) (v)	33	Active Collection System



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FACILITY	6NYCRR 208.4 (a)	34	- Removal Operation Standards - Collection system for Waste-in-Place 2 years or 5 years
FACILITY	6NYCRR 208.4 (b)	35	WellHead Monitoring - Pressure
FACILITY	6NYCRR 208.4 (c)	36, 37, 38, 39	
FACILITY	6NYCRR 208.4 (d)	40, 41	
FACILITY	6NYCRR 208.4 (e)	42	Vent Collected Gas to Control System
FACILITY	6NYCRR 208.4 (f)	43	
FACILITY	6NYCRR 208.4 (g)	44	
FACILITY	6NYCRR 208.5 (a) (1) (i)	45	Test Methods and Procedures-NMOC calculation (known waste deposition)
FACILITY	6NYCRR 208.5 (a) (1) (ii)	46	Test Methods and Procedures - NMOC Calculation where the waste deposition rate is NOT know
FACILITY	6NYCRR 208.5 (b)	47	Test Methods and Procedures - System NMOC Emission Rate
FACILITY	6NYCRR 208.5 (d)	48	
FACILITY	6NYCRR 208.6 (c)	49	Surface Methane Monitoring
FACILITY	6NYCRR 208.6 (d)	50	Instrument Specs for Surface Methane Analyzer
FACILITY	6NYCRR 208.7 (a)	51	
FACILITY	6NYCRR 208.7 (b)	52	Monitoring of Operations - Enclosed Combustor
FACILITY	6NYCRR 208.7 (c)	53	Monitoring of Operations - Open Flare
FACILITY	6NYCRR 208.7 (d)	54	Monitoring of Operations - Other Control Devices
FACILITY	6NYCRR 208.8 (b)	55	
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FACILITY	6NYCRR 208.9 (b)	58	Recordkeeping Requirements
FACILITY	6NYCRR 208.9 (c)	59	Recordkeeping Requirements
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FACILITY	6NYCRR 211.2	71	General Prohibitions - air pollution prohibited.
FACILITY	6NYCRR 211.3	19	General Prohibitions - visible emissions limited
FACILITY	6NYCRR 215	8	
W-DCHPR	6NYCRR 227.2 (b) (1)	68	
W-DCHPR	6NYCRR 227-2.4 (f) (2)	67	Emission limits for lean burn engines.
E-FLARE	6NYCRR 231-2	64, 65, 66	New Source Review in Nonattainment Areas and Ozone Transport Region

Applicability Discussion:

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

ECL 19-301.

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.



6NYCRR Part 200-.6

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

6NYCRR Part 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

6NYCRR Part 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.

6NYCRR Part 201-1.7

Requires the recycle and salvage of collected air contaminants where practical

6NYCRR Part 201-1.8

Prohibits the reintroduction of collected air contaminants to the outside air

6NYCRR Part 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.

6NYCRR Part 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.

6NYCRR Part 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.

6NYCRR 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.

6NYCRR 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.

6NYCRR 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.

6NYCRR Part 201-6.5(c)

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

6NYCRR Part 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.

6NYCRR Part 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.

6NYCRR 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.



6NYCRR Part 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.

6NYCRR 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.

6NYCRR Part 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.

6NYCRR Part 202-2.1

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

6NYCRR Part 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.

6NYCRR Part 211-2

This regulation prohibits any emissions of air contaminants to the outdoor atmosphere which may be detrimental to human, plant or animal life or to property, or which unreasonably interferes with the comfortable enjoyment of life or property regardless of the existence of any specific air quality standard or emission limit.

6 NYCRR Part 211.3

This condition requires that the opacity (i.e., the degree to which emissions other than water reduce the transmission of light) of the emissions from any air contamination source be less than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent.

6 NYCRR Part 215

Prohibits open fires at industrial and commercial sites.

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, BROOKHAVEN LANDFILL & RECYCLING AREA has been determined to be subject to the following regulations:

6NYCRR 201-7

This regulation sets forth an emission cap that cannot be exceeded by the facility. In this permit that cap is 225TPY of SO₂

6NYCRR 202-1.2

This regulation specifies that the department is to be notified at least 30 days in advance of any required stack test. The notification is to include a list of the procedures to be used that are acceptable to the department. Finally, free access to observe the stack test is to be provided to the department's representative.

6NYCRR 202-1.3

This regulation requires that any emission testing, sampling and analytical determination used to determine compliance must use methods acceptable to the department. Acceptable test methods may include but are not limited to the reference methods found in 40 CFR Part 60 appendix A and Part 61, appendix B. Alternate methods may be also be used provided they are determined to be acceptable by the department. Finally, unless otherwise specified, all emission test reports must be submitted within 60 days after completion of testing.

6NYCRR 207 .3

The facility wide SO₂ emissions will not exceed 225TPY.

6NYCRR 208 .3 (b)

This condition requires the owner or operator of an MSW landfill to submit a landfill design capacity report and a report of the emissions of non-methane organic carbon from the landfill. If the emissions of non-methane organic carbon are less than 50 megagrams/year (55 tpy), the report must be re-submitted annually. If the emissions are greater than 50 megagrams/year, a collection and control system must be installed at the landfill.

6NYCRR 208 .3 (b) (2) (i) ('e')

This condition contains the milestone dates for installation and operation of the collection and control system at the landfill.

6NYCRR 208 .3 (b) (2) (iii) ('a')

This condition contains the requirements to be met by the flare controlling the landfill gas.

6NYCRR 208 .3 (b) (2) (iii) ('c')

This condition requires that all of the collected gas be sent to a treatment system that processes the collected gas for subsequent sale or use

6NYCRR 208 .3 (b) (2) (v)

This condition sets forth the requirements to be met for removal of the collection and control system. For the system to be removed, the non-methane organic compound emission rate must be less than 50 megagrams per year (55 tons/year) and the system must have been in operation at least 15 years.



6NYCRR 208 .4 (a)

This condition requires the owner or operator of this landfill gas collection system to operate the collection system such that gas is collected from each area, cell or group of cells in the landfill in which solid waste has been in place for 5 years or more if active or 2 years or more if inactive

6NYCRR 208 .4 (b)

This condition requires that the collection system be operated at negative pressure.

6NYCRR 208 .4 (c)

This condition requires that the temperature of the landfill not exceed 55o C and that the nitrogen content not exceed 20% or the oxygen content not exceed 5%. This is to avoid landfill gas fires or infiltration of ambient air into the system.

6NYCRR 208 .4 (d)

This condition requires that the concentration of methane on the surface of the landfill be less than 500 parts per million.

6NYCRR 208 .4 (e)

This condition requires that all collected gases are sent to the control system

6NYCRR 208 .4 (f)

This condition requires that the control or treatment system be operated at all times when the collected gas is sent to the system

6NYCRR 208 .4 (g)

This condition requires that the landfill owner or operator take corrective action if the monitoring of the landfill shows any problems with the collection and/or control system.

6NYCRR 208 .5 (a) (1) (i)

This condition contains the equation to be used to determine the emission rate of non-methane organic carbon from the landfill if the annual waste deposition rate is known

6NYCRR 208 .5 (a) (1) (ii)

This condition contains the equation to be used to determine the emission rate of non-methane organic carbon from the landfill if the annual waste deposition rate is not known.

6NYCRR 208 .5 (b)

This condition requires the landfill owner or operator to calculate the emission rate of non-methane organic carbon in order to determine when the collection and control system can be removed.

6NYCRR 208 .5 (d)

This condition provides the equation to be used to determine the efficiency of the control system in destroying the non-methane organic carbon in the landfill gas.

6NYCRR 208 .6 (c)

This condition sets forth the procedures to be used to determine the concentration of methane on the surface of the landfill.

6NYCRR 208 .6 (d)

This condition sets forth the equipment specifications of the analyzer used to determine the concentration of methane on the surface of the landfill.



6NYCRR 208 .7 (a)

This condition sets forth the monitoring requirements for the collection system. The temperature, pressure and either oxygen or nitrogen content of the gas must be checked monthly.

6NYCRR 208 .7 (b)

This condition sets forth the requirements for the use of an enclosed combustor (i.e., enclosed flare, engine, turbine, etc) to control landfill gas.

6NYCRR 208 .7 (c)

This condition sets forth the requirements for the use of a flare to control landfill gas.

6NYCRR 208 .7 (d)

This condition requires for landfills that use a device other than an open flare or enclosed combustor to control the landfill gas, the owner or operator provide information satisfactory to the Department describing the operation of the control device, the operating parameters that would indicate proper performance and appropriate monitoring procedures.

6NYCRR 208 .8 (b)

This regulation sets forth the requirements for the NMOC emission rate report.

6NYCRR 208 .8 (f)

This condition requires the owner or operator of a landfill seeking to comply with 6 NYCRR Part 208.3(b)(2) using an active collection system designed in accordance with 6 NYCRR Part 208.3(b)(2)(ii) to submit to the Department annual reports. The initial annual report shall be submitted within 180 days of installation and start-up of the collection and control system, and shall include the initial performance test report required under 40 CFR Part 60.8.

6NYCRR 208 .8 (g)

This condition specifies the information required to be included in the performance test report.

6NYCRR 208 .9 (b)

This condition requires the owner or operator of the landfill to keep up-to-date, readily accessible records for the life of the control equipment of the data gathered during the initial performance test or compliance determination. Records of subsequent tests or monitoring shall be maintained for a minimum of 7 years. Records of the control device vendor specifications shall be maintained until removal.

6NYCRR 208 .9 (c)

This condition requires the owner or operator of the landfill shall keep for 7 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in 6 NYCRR Part 208.7 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.

6NYCRR 208 .9 (e)

This condition requires the owner or operator of the landfill to keep for at least 7 years of up-to-date, readily accessible records of all collection and control system exceedances of the operational standards in 6 NYCRR Part 208.4, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

6NYCRR 227 .2 (b) (1)

This regulation is from the 1972 version of Part 227 and still remains as part of New York's SIP. The rule establishes a particulate limit of 0.10 lbs/mmBtu based on a 2 hour average emission for any oil fired stationary



combustion installation.

6NYCRR 227-2.4 (f) (2)

This citation sets emission limits of oxides of nitrogen for lean burn engines.

6NYCRR 231-2

The provisions of Subpart 231-2 apply to new or modified major facilities. The contaminants of concern state-wide are nitrogen oxides and volatile organic compounds since New York State is located in the ozone transport region and because there are ozone non-attainment areas within the state. In addition, particulate matter less than 10 microns in size (PM-10) is a non-attainment contaminant in Manhattan County.

Compliance Certification

Summary of monitoring activities at BROOKHAVEN LANDFILL & RECYCLING AREA:

Location Facility/EU/EP/Process/ES	Cond No.	Type of Monitoring
FACILITY	5	record keeping/maintenance procedures
FACILITY	23	record keeping/maintenance procedures
FACILITY	25	monitoring of process or control device parameters as surrogate
FACILITY	6	record keeping/maintenance procedures
FACILITY	35	work practice involving specific operations
FACILITY	37	work practice involving specific operations
FACILITY	38	work practice involving specific operations
FACILITY	39	work practice involving specific operations
FACILITY	40	record keeping/maintenance procedures
FACILITY	41	ambient air monitoring
FACILITY	51	record keeping/maintenance procedures
FACILITY	56	record keeping/maintenance procedures
FACILITY	58	record keeping/maintenance procedures
FACILITY	59	record keeping/maintenance procedures
FACILITY	60	record keeping/maintenance procedures
W-DCHPR	68	intermittent emission testing
W-DCHPR	67	intermittent emission testing
E-FLARE	64	intermittent emission testing
E-FLARE	65	intermittent emission testing
E-FLARE	66	intermittent emission testing

Basis for Monitoring

To verify compliance with New Source Review regulation 6NYCRR Part 231-2, the enclosed flare installed at cells 5 and 6 shall be tested for NOx, CO, and NMOC.

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