



**Facility Identification Data**

Name: BROOKHAVEN NATIONAL LABORATORY  
Address: 53 BELL AVE  
UPTON, NY 11973

**Owner/Firm**

Name: U S DEPT OF ENERGY  
Address: 1000 INDEPENDENCE AVE SW  
WASHINGTON, DC 20585, USA  
Owner Classification: Federal

**Permit Contacts**

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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**

BNL is a government-owned contractor-operated research facility. The facility has applied to renew an existing Title V permit. The laboratory's support organizations manage a number of facilities which are subject to federally enforceable regulatory requirements. Among the more significant facilities is the central steam facility which operates four boilers. Two of the boilers are subject to NSPS Subpart DB requirements and are equipped with continuous emissions monitoring systems. All of the boilers are subject to, and comply with, 6 NYCRR Part 227-2 NOx Reasonable Available Control Technology requirements. Other regulated sources include a paint spray booth



subject to 6 NYCRR Part 228 provisions, and two on-site gasoline refueling facilities which must meet 6 NYCRR Part 22 5-3 Reid Vapor Pressure and Federal reformulated gasoline provisions, along with 6 NYCRR Part 230 Stage I and Stage II vapor collection system requirements.

### Attainment Status

BROOKHAVEN NATIONAL LABORATORY 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 $\mu$ in diameter (PM10)	ATTAINMENT
Sulfur Dioxide (SO <sub>2</sub> )	ATTAINMENT
Ozone*	SEVERE NON-ATTAINMENT
Oxides of Nitrogen (NO <sub>x</sub> )**	ATTAINMENT
Carbon Monoxide (CO)	ATTAINMENT

\* Ozone is regulated in terms of the emissions of volatile organic compounds (VOC) and/or oxides of nitrogen (NO<sub>x</sub>) which are ozone precursors.

\*\* NO<sub>x</sub> has a separate ambient air quality standard in addition to being an ozone precursor

### Facility Description

BNL is a government-owned contractor-operated research facility. The laboratory is managed by Brookhaven Science Associates (BSA) which is a limited liability company with two principal members: the Research Foundation of the State University of New York on behalf of SUNY at Stony Brook and Battelle Memorial Institute. The laboratory carries out basic and applied research in the following fields: high-energy nuclear and solid state physics; fundamental material and structural properties and the interactions of matter; nuclear medicine; biomedical and environmental sciences; and selected energy technologies. Organizationally, the laboratory has ten departments and two divisions which conduct basic and applied research at the numerous on-site facilities. The research activities of these departments are supported by the efforts of numerous support organizations. The laboratory's support organizations manage a number of facilities which are subject to federally enforceable regulatory requirements. Among the more significant facilities is the central steam facility which operates four boilers. Two of the boilers are subject to NSPS Subpart DB requirements and are equipped with continuous emissions monitoring systems. All of the boilers are subject to, and comply with, 6 NYCRR Part 227-2 NO<sub>x</sub> Reasonable Available Control Technology requirements. Other regulated sources include a paint spray booth subject to 6 NYCRR Part 228 provisions, and two on-site gasoline refueling facilities which must meet 6 NYCRR Part 22 5-3 Reid Vapor Pressure and Federal reformulated gasoline provisions, along with 6 NYCRR Part 230 Stage I and Stage II vapor collection system requirements.

### Permit Structure and Description of Operations



The Title V permit for BROOKHAVEN NATIONAL LABORATORY 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 NATIONAL LABORATORY is defined by the following emission unit(s):

Emission unit U61005 - This emission unit located in Building 610 consists of two commercial-institutional sized boilers (Boilers 1A and 5) each with its own separate stack (emission points 6101A and 61005). Boiler 1A has a nominal heat capacity of 56.7 MMBTU/hr and is used for peaking and intermittent loads. Boiler 5 has a nominal heat capacity of 225 MMBTU/hr and is used primarily to meet winter base loads. Since it was constructed before 1986, boiler 5 is not subject to NSPS subpart DB. Boiler 5 has dual fuel firing capabilities enabling it to burn oil or natural gas. Compliance with the NO<sub>x</sub> RACT emission standard of 6 NYCRR Part 227-2 is achieved by burning residual fuel with a low fuel-bound nitrogen content. The NO<sub>x</sub> RACT emission limit for large and mid size boilers primarily burning residual fuel is 0.30 lbs/MMBTU. Compliance with this emissions limit was demonstrated during stack testing conducted in January 1995 while each boiler burned No. 6 oil with a fuel nitrogen content of less than 0.3%. Continued compliance with the emission standard is presumed so long as laboratory analysis of composite residual fuel samples confirms the fuel nitrogen content does not exceed 0.3% by weight. Based on the AP42 emission factor for uncontrolled (pre-NSPS) large wall fired boilers, NO<sub>x</sub> emissions from boiler 5 while burning natural gas are presumed to be 0.28 lbs/MMBTU. Boiler No. 5 primarily burns residual fuel and natural gas. However, occasionally small volumes of distillate fuel are combusted. Small quantities of waste oil generated on site are sometimes accepted for burning in Boiler 5 provided sample analysis confirms that the oil meets acceptance criteria for waste fuels established by 6 NYCRR 225-2.4 and 6 NYCRR 374-2.2. Accepted waste oil is blended with residual fuel in the CSF fuel storage tanks. Boiler 1A burns strictly residual fuel and residual fuel blended with small quantities of waste oil at this time. BNL reserves the right to burn distillate fuel in both boilers. Based on the AP-42 NO<sub>x</sub> emission factor for uncontrolled oil fired boilers (24 lbs/1000 gals), NO<sub>x</sub> emissions from Boiler 5 would be approximately 0.163 lbs/MMBTU.

Emission unit U61005 is associated with the following emission points (EP): 61005, 6101A

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

Process: SF1 is located at Building 610 - Burning mostly #6 oil with low volumes of waste oil in Boiler 1A and Boiler 5. Both boilers are subject to Part 227-2 NO<sub>x</sub> limits. No. 6 oil is guaranteed at or below 0.3% wt. Nitrogen by the supplier.

Process: SF2 is located at Building 610 - Burning of natural gas in Boiler 5. The Part 227-2 NO<sub>x</sub> limit of 0.3



lbs/MMBTU applies when natural gas is burned.

Process: SF3 is located at Building 610 - Burning of distillate oil in Boilers 1A and 5. At present only Boiler 5 burns distillate oil.

Emission unit U61006 - This Emission Unit located in Building 610. It consists of one commercial-institutional sized boiler (Boiler 6) with its own stack (Emission Point 61006). This boiler has a nominal heat capacity of 147 MMBTU/hr. This boiler is subject to NSPS Subpart DB requirements. Boiler 6 has a heat release rate of 70,402 BTU/hr-cubic-foot. This boiler is equipped with dual fuel burners which enable it to burn oil or natural gas. Because construction of Boiler 6 commenced prior to June 19, 1986, this boiler is only subject to the nitrogen oxide standards of Subpart DB. With Boiler 6, compliance with the emission standards is achieved through the use of low NOx burners. The boiler is also subject to the NOx RACT provisions of 6 NYCRR Part 227-2. The Part 227 -2 emission limit for NOx for large boilers is 0.30 lbs/MMBTU while burning oil or natural gas, as compared to the NSPS limits of 0.40 lb/MMBTU while burning residual fuel, and 0.20 lbs/mmbtu when burning natural gas or distillate oil. Compliance with the lower emissions limit of Part 227-2 is achieved through the combustion of No. 6 oil with a fuel nitrogen content of less than 0.3%. The manufacturer of boiler 6 has guaranteed that nitrogen oxide (NOx) emissions will be less than the 0.20 lb/mmbtu emissions standard, when the boiler is firing natural gas. Boiler No. 6 primarily burns residual fuel and natural gas, however, occasionally small volumes of distillate fuel are combusted. Small quantities of waste oil generated on site are also accepted for burning provided sample analysis confirms that the oil meets acceptance criteria for waste fuel established by 6 NYCRR 225-2 and 6 NYCRR 374-2.2. Accepted waste oil is blended with residual fuel in the CSF fuel storage tanks.

Emission unit U61006 is associated with the following emission points (EP):

61006

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

Process: SF4 is located at Building 610 - Burning mostly #6 oil with low volumes of waste oil in Boiler 6. The fuel burned has fuel-bound nitrogen content below 0.3% nitrogen, which is guaranteed by supplier. This 147 MMBTU/hr package boiler is subject to NSPS Subpart DB and Part 227-2 NOx limits.

Process: SF5 is located at Building 610 - Burning natural gas in Boiler 6.

Process: SF6 is located at Building 610 - Burning of distillate oil in Boiler 6.

Emission unit U61007 - This emission unit, located in Building 610, consists of one commercial-institutional sized boiler (Boiler 7) with its own stack (Emission Point 61007). This boiler has a nominal heat capacity of 147 MMBTU/hr. This boiler is subject to NSPS Subpart Db requirements. Boiler 7 has a heat release rate of 87,814 BTU/hr-cubic-foot. The boiler is equipped with dual fuel burners which enable it to burn oil or natural gas.

As construction of Boiler 7 commenced after June 19, 1986, this boiler is subject to the nitrogen oxide (NOx), sulfur dioxide (SO<sub>2</sub>), and particulate (PM) standards of Subpart Db. The boiler is also subject to the NOx RACT provisions of 6 NYCRR Part 227-2.

The Part 227-2 emission limit for NOx for large boilers is 0.30 lbs/MMBTU, while burning oil or natural gas; as compared to the NSPS limits of 0.40 lbs/MMBTU, while burning residual oil, and 0.20 lbs/MMBTU, while burning natural gas or distillate oil. The Subpart DB PM emission standard is 0.10 lbs/MMBTU, and the SO<sub>2</sub> emission standard is 0.5 lbs/MMBTU, while burning oil other than very low sulfur oil.

Compliance with the emission standards are achieved through the use of low NOx burners and an overfire air NOx reduction system. Compliance with the lower emissions limit of Part 227-2 is achieved through the combustion of No. 6 oil with a fuel nitrogen content of less than 0.3% and a fuel sulfur content of less than 0.3%. The manufacturer of Boiler 7 has guaranteed that NOx emissions will be less than the 0.20 lbs/MMBTU emission standard, when the boiler is firing natural gas.

Boiler No. 7 primarily burns residual fuel and natural gas, however, occasionally small volumes of distillate fuel are combusted. Small quantities of waste oil generated on site are also accepted for burning provided sample analysis



confirms that the oil meets acceptance criteria for waste fuel established by 6 NYCRR 225-2 and 6 NYCRR 374-2.2. Accepted waste oil is blended with residual fuel in the CSF fuel storage tanks.

Emission unit U61007 is associated with the following emission points (EP):  
61007

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

Process: SF7 is located at Building 610 - Burning mostly #6 oil with low volumes of waste oil in Boiler 7. a 147 MMBTU/hr package boiler, subject to NSPS Subpart DB NOx & opacity limits and Part 227-2 NOx limit. The No. 6 oil is guaranteed at or below 0.3% sulfur & 0.3% nitrogen by the supplier.

Process: SF8 is located at Building 610 - Burning of natural gas in Boiler 7.

Process: SF9 is located at Building 610 - Burning of distillate oil in Boiler 7.

Emission unit UCOILS - This emission unit consists of a magnet coil coating operation in Building 902 where multiple fiberglass and kevlar yarn substrates are applied to magnet coils using two-part epoxy adhesives. The adhesives and substrates are applied in successive steps and final curing is conducted in a baking oven. The three hoods which capture emissions during adhesive application and the oven exhaust are connected to a common stack (Emission Point 90206). Compliance with 40 CFR 60 Subpart TT is maintained through the use of VOC compliant adhesives.

Emission unit UCOILS is associated with the following emission points (EP):  
90206

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

Process: AD1 is located at Building 902 - Multiple layer application of fiberglass & kevlar yarns to magnet coils with tw-part epoxy adhesives.

Emission unit UFUELS - This emission unit includes two on-site gasoline refueling facilities.

The facility located at Building 630 is a contractor operated facility that services private vehicles. The contractor is responsible for inspecting and replacing pump nozzles and hoses and for complying with the operational requirements of 6 NYCRR Part 230. As the owner of the facility, DOE/BNL assumes responsibility for overall compliance with Part 230 requirements and other applicable regulatory requirements at this facility. The facility has three pumps (two pump hoses each) that dispense low and medium octane grades of gasoline. The pumps are connected to three 8000 gallon double walled underground storage tanks. All tanks are equipped with Stage I and Stage II engineering controls. Uncaptured vapors generated during tank loading and tank breathing vapors are passively vented to separate stacks (Emission Points 63001, 63002 and 63003).

The facility located at Building 423 is a refueling facility for BNL fleet gasoline powered vehicles. The facility has two pumps (two pump hoses each) that dispense low octane grades of gasoline. The pumps are connected to two 8000 gallon double walled underground storage tanks. Both tanks are equipped with Stage I and Stage II engineering controls. Uncaptured vapors generated during tank loading and tank breathing vapors are passively vented to separate stacks (Emission Points 42309 and 42310). BNL is located in Suffolk County, a severe ozone non-attainment area, and a county included in the New York City Consolidated Metropolitan Statistical Area. Due to the laboratory's location, certain federally enforceable restrictions apply to the gasoline that can be received and dispensed from gasoline refueling facilities at the site. In particular, because BNL is in a severe ozone non-attainment area, the Reid vapor pressure of the gasoline delivered and dispensed at BNL's two refueling facilities cannot exceed 9.0 pounds per square inch (psi) during the peak ozone season (May 1 - September 15). In addition, to meet federally enforceable requirements intended to reduce automobile emissions of volatile organic compounds and hazardous air pollutants, reformulated gasoline must be supplied and dispensed year round. Reformulated gasoline and Reid vapor pressure requirements are found respectively in 40 CFR 80 Subpart D and 6 NYCRR 225-3.

Emission unit UFUELS is associated with the following emission points (EP):  
42309, 42310, 63001, 63002, 63003

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

Process: RVP is located at Building 423 - Dispensed gasoline cannot have a Reid vapor pressure greater than



9.0 pounds per square inch (psi), during the period May 1st through September 15th of each year.

If NYSDEC invokes a carbon monoxide contingency measure, to limit the maximum allowable wintertime RVP of gasoline, the maximum RVP shall be 13.5 psi during the period November 1st the last day of February. (NYCRR Part 225-3.3)

Emission unit UHALON - This unit consists of numerous portable Halon 1211 fire extinguishers. Several Halon 1301 cylinders associated with various fixed total flooding fire suppression systems and Halon 1301 reserve tanks. The unit also includes a portable halon 1211 recovery/recharge system. This unit is subject to provisions of 40 CFR Part 82 Subpart H, entitled Halon Emissions Reduction. Emissions are restricted to de minimas releases from the Halon recovery devices during periodic servicing of extinguishers.

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

Process: HR1 Recovery and recycling of Halon from portable extinguishers.

Emission unit ULITHO - This unit located in Building 197 includes two lithographic offset printing machines which are vented internally. The older machine a Sprint 26 model was installed in 1993 with a wall exhaust, and is used to capture and remove nuisance odors from the offset printers and from other photographic equipment located in the room (Emission Point 19709). The second smaller A.B. Dick offset printer was installed in 1995. The fountain solution used in the two offset printers are subject to 6 NYCRR Part 234 VOC limits. The fountain solutions, used in both presses, contain less than 10 % by weight volatile organic compounds.

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

19709

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

Process: LP1 is located at Building 197 - Lithographic offset printing with Sprint 26 & A.B. Dick presses. The Sprint 26 fountain solution is made with 10 gals H<sub>2</sub>O & 30 ounces each of 2 wetting agents. The A.B. Dick press tank filled with 300 mils H<sub>2</sub>) and 50 Mils of 1 wetting agent. VOC content of press fountain solutions is <10 % wt.

Emission unit UMETAL - Cold cleaning of metal parts at various site locations. Unit consists of one internally vented immersion cleaning tank in Bldg. 423, one internally vented immersion cleaning tank in Bldg 479, one internally vented immersion cleaning tray in Bldg. 610, two internally vented remote reservoir degreasers in Bldg. 630, one internally vented hose-applied parts cleaning tank in Bldg 903, one spray cleaning process in bldg 923 which consists of an electronic parts cleaning booth and two drying ovens manifolded to emission point 92301, and the BNL Central Degreasing Facility in Bldg. 498 which consists of three immersion wash tanks and three rinse tanks (exhausted to stack 49801) and a drying oven with its own stack. This unit also has one inactive internally vented vapor/ultrasonic degreasing unit previously used in Bldg. 924 to clean coiled cables.

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

02AMB, 49801, 92301

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

Process: SM1 Several metal parts cleaning operations subject to Part 226 provisions for cold cleaning degreasing. Cold cleaning operations subject to Part 226 must only use cleaning solvents that have vapor pressures of 1.0 mm of mercury, or less, at 20 C.

Emission unit URFRIG - This unit covers all refrigerant recovery, recycling and reclamation activities that take place during the repair, maintenance, and servicing of refrigeration and air conditioning equipment located across the site. This unit includes centrifugal chillers, reciprocating chillers, rotary screw chillers, split air conditioning units, package air conditioning units, and refrigerant recovery devices utilized by plant engineering to recover any refrigerants that might be released during servicing and repair of refrigeration and air conditioning equipment. This unit is subject to provisions of 40 CFR Part 82 Subpart F, entitled Refrigerant Recovery and Recycling Requirements for Refrigeration and Air Conditioning Equipment and Appliances. This unit also covers various pieces of commercial refrigerant equipment utilized in Buildings 30 and 488 that are serviced by an outside contractor.

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

Process: RC1 This process covers BNL appliances normally containing less than 50 lbs of refrigerant. Refrigerant



recovery and recycling equipment, used by BNL certified technicians to service covered equipment, meets the levels of evacuation established by EPA as noted in section 82.158. Includes 20 reciprocal chillers, 194 split units and 243 package units. The number of units is subject to change as BNL adds new equipment or replaces old equipment. Process: RC2 This process covers BNL appliances normally containing more than 50 lbs refrigerant. Ref. Recovery and recycling equipment, used by EPA certified technicians to service covered equipment, meet the levels of evacuation established by EPA as noted in 40 CFR section 82.158. Includes 27 reciprocal, 19 centrifugal and 11 rotary chillers, 16 split and 4 package units. The number of units is subject to change as BNL adds new equipment or replaces old equipment.

Emission unit UINSIG - This unit includes one small scale silver electroplating operations located in Bldg 922, which is used to electroplate copper magnet bus bars and other metal parts. Fumes from the operation in Bldg. 922 are released to a stack (Emission Point 92204).

The unit includes a magnet coil production press. Trace quantities of carbon monoxide, hydrocarbons, and particulates are released when minor equipment leaks cause the heat transfer fluid to contact the heated exterior of the equipment. The heat transfer fluid is pumped through segregated circuits and is used to cure an insulating epoxy outer coating on superconducting magnets. Emissions from this operation are vented to a stack (Emission Point 92402).

This unit also includes a Specialty Coating System G3P-8 Spin Coater, that is used to apply various coatings (polymer films, waxes, long organic molecules, and metal nano-particles) to water substrates for subsequent surface chemistry studies. Evaporative emissions from solvents used with the various coatings are vented to the atmosphere via either of two lab hoods in Room 2-109 in Bldg. 510 (Emission Point 510AK). Solvents used with the various coatings include acetone, benzene, chloroform, hexane, isopropyl alcohol, tetrahydrofuran, and toluene.

At the Target Processing Laboratory (TLP) in Bldg. 801, various solvents are used to chemically extract isotopes from irradiated targets to be used later for radiopharmaceutical production. Carbon tetrachloride and methyl ethyl ketone are used in small quantities respectively to extract germanium-68, zinc-65, and technetium-96 from irradiated targets. After the isotopes are recovered, the evaporated extraction solvents pass through two granulated activated charcoal filters in series before they are released to the atmosphere through a 100 meter stack (Emission Point 75001).

This unit also includes seven aerosol can recycling units that have been purchased to reduce the waste disposal costs of used aerosol cans. The two types of units purchased, the Aerosolv Aerosol Can Recycling System and the AeroVent 3, both operate on the same principle. The unit's thread directly onto the two inch diameter bung of a 55-gallon drum. Each of the units' activated carbon filters thread directly to the 3/4 inch diameter bung. A single can is then placed in the unit. When the unit's handle is depressed, the unit punctures the can allowing the product to drain into the drum. Residual propellants pass through activated carbon filters where VOC's are adsorbed. The units are being used in five areas across the site (Bldgs. 326, 423, 339, 624, and 922) where aerosol cans are collected. Chlorofluorocarbon propellants and hydrocarbons not captured by the activated carbon filters are released into the ambient air.

Also included in this unit is the printed circuit board laboratory, in Bldg 535B, where prototype circuit boards are made for BNL experiments. Preparation of the boards involves several steps. The following is a brief summary of the printed circuit board laboratory emission sources. Circuit board component holes are drilled using a manually adjusted computer controlled drilling machine (trivial source ID 535AT). Within the printed circuit board process room, several process tanks are used in a series of steps to pre clean the boards. Volatile organic compounds are released from the cleaner conditioner used in one of the pre-cleaning tanks. Acid etching also takes place within the room when the boards are immersed in dilute baths of hydrochloric acid and sulfuric acid. The boards are also electroplated with tin in a plating bath. Finally the boards are immersed in an acid copper plating bath which contains sulfuric acid and hydrochloric acid. To help reduce evaporative emissions from this tank, small plastic balls float atop the solution reducing the surface area. All of the tanks within this room are exhausted to a common stack (Emission Point 53503). Residual water on the boards is then baked off in an electric oven (trivial source ID



535AW). After a circuit pattern is created on the surface of the board through an imaging process, the boards are immersed in a tank containing an aqueous developer. This aqueous formula, in use since October 1997, is 99% water, 0.999% potassium carbonate and 0.001% anti-foaming agent by volume. Since aqueous formulas are used, no emissions are released through the stack (Emission Point 53501). An etching machine filled with an alkaline solution is used to remove background copper from boards after removal from the copper plating bath. From this source ammonium hydroxide and trace emissions of ammonium chloride and copper chloride are released through Emission Point 53502.

The aggregate annual emissions from the sources and operations covered under this emission unit are less than the thresholds established in 6 NYCRR 201-6.3(d)(7) for insignificant emission units.

Emission unit UINSIG is associated with the following emission points (EP):  
01AMB, 510AK, 53501, 53502, 53503, 75001, 92204, 92402

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

Process: IN1A number of of permitted emission sources whose combined emissions are insignificant.

Emission unit UMVACS - BNL operates a fleet of approximately 292 vehicles. These vehicles are serviced at the automotive service shop in Bldg 423. It is estimated that there are 70 vehicles with air conditioners charged with R-12 or with R-134a. BNL services heavy duty vehicles in its Heavy Equipment Maintenance Operations Shop, also in Bldg. 423. Several of these heavy duty vehicles have air conditioners that are periodically serviced. The laboratory also has a contractor operated facility located at Building 630 that services privately owned vehicles of employees and laboratory guests.

This emission unit covers activities associated with the service and repair to fleet and private vehicle air conditioning equipment. This unit includes refrigerant recovery/recycling devices that can be used with R-12 and R-134a motor vehicle air conditioners.

Emission unit UMVACS is associated with the following emission points (EP):  
03AMB

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

Process: MV1 is located at Building 423 - Service and repair of motor vehicle air conditioners containing R-12. The Robinair Model 117700 and 17700A refrigerant recovery/recycling devices are certified to meet the standards set forth in 40 CFR 82 Subpart B Appendix A. Service technicians at the automotive repair shop and Upton Industries have passed certification training as per Section 82.40.

Process: MV2 is located at N/A, Building 423 - Service and repair of motor vehicle air conditioners containing R-134a. The Solar Model 8134 and Robinair Model 34700 refrigerant recovery/recycling devices are used to recover and recycle R-134a. Service technicians at the automotive repair shop and Upton Industries have passed certification training as per Section 82.40.

Emission unit UPAINTE - This emission unit is located in building 244 and consists of a spray booth (emission point 24402) and two paint storage cabinets (244AE) both internally vented.

Emission unit UPAINTE is associated with the following emission points (EP):  
00AMB, 24402

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

Process: PT1 is located at Building 244 - Spray painting of wood furniture and miscellaneous metal parts w/VOC compliant coatings. Compliant coatings include Coranado Satin Black W/B Lacquer, Coranado W/B Gloss Lacquer, Coranado Semi-gloss W/B Lacquer, and PPG Galvanized Steel Primer.

#### **Title V/Major Source Status**

BROOKHAVEN NATIONAL LABORATORY is subject to Title V requirements. This determination is based on the following information:

This facility is subject to Title V requirements because it is a major source for NO<sub>x</sub>, VOC, CO and SO<sub>2</sub> emissions.



The potential to emit for these pollutants are as follows: NO<sub>x</sub> is between 100 and 250 tons per year, VOC is between 25 and 40 tons per year, CO is between 100 and 250 tons per year and SO<sub>2</sub> is above 250 tons per year.

### Program Applicability

The following chart summarizes the applicability of BROOKHAVEN NATIONAL LABORATORY 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	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**

8733

**Description**

NONCOMMERCIAL RESEARCH ORGANIZATIONS

**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
1-03-005-01	EXTERNAL COMBUSTION BOILERS - COMMERCIAL/INDUSTRIAL COMMERCIAL/INSTITUTIONAL BOILER - DISTILLATE OIL Grades 1 and 2 Oil
1-03-006-01	EXTERNAL COMBUSTION BOILERS - COMMERCIAL/INDUSTRIAL COMMERCIAL/INSTITUTIONAL BOILER - NATURAL GAS Over 100 MMBtu/Hr
1-03-004-01	EXTERNAL COMBUSTION BOILERS - COMMERCIAL/INDUSTRIAL COMMERCIAL/INSTITUTIONAL BOILER - RESIDUAL OIL Grade 6 Oil
2-88-888-01	INTERNAL COMBUSTION ENGINES - FUGITIVE EMISSIONS INTERNAL COMBUSTION ENGINE: FUGITIVE EMISSIONS, OTHER/NOT CLASSIFIED Specify in Comments
3-12-999-99	MACHINERY, MISCELLANEOUS ELECTRICAL EQUIPMENT - MISCELLANEOUS MACHINERY Other Not Classified
3-99-999-94	MISCELLANEOUS MANUFACTURING INDUSTRIES MISCELLANEOUS INDUSTRIAL PROCESSES Other Not Classified
4-01-003-98	ORGANIC SOLVENT EVAPORATION COLD SOLVENT CLEANING/STRIPPING Other Not Classified
4-05-004-15	PRINTING/PUBLISHING PRINTING/PUBLISHING - GENERAL PRINT/PUBLISH:OFFSET LITHOGRAPHY:DAMPENING SOLN W/ALCOHOL SUBSTITUTE
4-02-002-10	SURFACE COATING OPERATIONS SURFACE COATING APPLICATION - GENERAL Paint: Water-Base
4-02-007-12	SURFACE COATING OPERATIONS SURFACE COATING APPLICATION - GENERAL SURFACE COATING APPLICATION-GENERAL: ADHESIVE:ROLL-ON
4-06-006-03	TRANSPORTATION AND MARKETING OF PETROLEUM PRODUCTS CONSUMER (CORPORATE) FLEET REFUELING - STAGE II VAPOR LOSS W/CONTROLS
3-14-013-AA	TRANSPORTATION EQUIPMENT AUTOMOTIVE REPAIR AIR CONDITIONER REFRIGERANT CAPTURE

### 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.



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Cas No.	Contaminant Name	PTE		
		lbs/yr	Range	
000077-92-9	1,2,3-PROPANETRICARBOXYLIC ACID,2-HYDROXY		226000	A
000120-80-9	1,2-BENZENEDIOL	318000	Y	
000107-06-2	1,2-DICHLOROETHANE	98400	Y	
000111-87-5	1-OCTANOL C8H18O	71400	A	
004246-51-9	1-PROPANAMINE, 3,3'-[OXYBIS(2,1-ETHANEDIYLOXY)]BIS-		890000	A
000102-71-6	2,2,2-NITRILOTRIS ETHANOL	79400	A	
000141-43-5	2-AMINOETHANOL	pteyear	A	
001338-23-4	2-BUTANONE PEROXIDE	pteyear	A	
000108-10-1	2-PENTANONE, 4-METHYL	pteyear	Y	
029911-28-2	2-PROPANOL,1-(2-BUTOXY-1-METHYLETHOXY)		pteyear	A
090438-79-2	ACETIC ACID, C6-8 BRANCHED ALKYL ESTERS		pteyear	A
007429-90-5	ALUMINUM	pteyear	A	
001344-28-1	ALUMINUM OXIDE	pteyear	A	
007664-41-7	AMMONIA	pteyear	A	
001341-49-7	AMMONIUM BIFLUORIDE (NH4)(HF2)	pteyear		A
012125-02-9	AMMONIUM CHLORIDE	pteyear	A	
001336-21-6	AMMONIUM HYDROXIDE	pteyear	A	
007440-36-0	ANTIMONY	pteyear	Y	
007440-37-1	ARGON AR	pteyear	A	
007440-38-2	ARSENIC	pteyear	Y	
001332-21-4	ASBESTOS	pteyear	Y	
000071-43-2	BENZENE	pteyear	Y	
007440-41-7	BERYLLIUM	pteyear	Y	
001303-96-4	BORAX NA2(B4O7).10H2O	pteyear	A	
010043-11-5	BORON NITRIDE	pteyear	A	
000353-59-3	BROMOCHLORODIFLUOROMETHANE	pteyear		A
000071-36-3	BUTANOL	pteyear	A	
007440-43-9	CADMIUM	pteyear	Y	
001306-19-0	CADMIUM OXIDE	pteyear	Y	
000630-08-0	CARBON MONOXIDE	pteyear		
000056-23-5	CARBON TETRACHLORIDE	pteyear	Y	
007782-50-5	CHLORINE	pteyear	Y	
000075-45-6	CHLORODIFLUORO-METHANE	pteyear		A
000067-66-3	CHLOROFORM	pteyear	Y	
000076-15-3	CHLOROPENTAFLUOROETHANE	pteyear		A
007440-47-3	CHROMIUM	pteyear	Y	
061789-51-3	COBALT NAPHTHA	pteyear	Y	
007440-50-8	COPPER	pteyear	A	
001344-67-8	COPPER CHLORIDE	pteyear	A	
000075-71-8	DICHLORODIFLUOROMETHANE	pteyear		A
000075-09-2	DICHLOROMETHANE	pteyear	Y	
000067-64-1	DIMETHYL KETONE	pteyear	A	
034590-94-8	DIPROPYLENE GLYCOL METHYL ETHER	pteyear		A
064742-47-8	DISTILLATES (PETROLEUM), HYDROTREATED LIGHT		pteyear	A
061788-97-4	EPOXY RESIN-HARDENER	pteyear	A	
000071-55-6	ETHANE, 1,1,1-TRICHLORO	pteyear	Y	
000075-37-6	ETHANE, 1,1-DIFLUORO-	pteyear	A	
000075-68-3	ETHANE, 1-CHLORO-1,1-DIFLUORO-	pteyear		A
002837-89-0	ETHANE, 2-CHLORO 1,1,1,2 TETRAFLURO	pteyear		A
000111-46-6	ETHANOL, 2,2'-OXYBIS-	pteyear	B	
000111-76-2	ETHANOL, 2-BUTOXY-	pteyear	Y	
000112-07-2	ETHANOL, 2-BUTOXY-, ACETATE	pteyear		Y
000064-17-5	ETHYL ALCOHOL (ETHANOL)	pteyear	A	
000075-21-8	ETHYLENE OXIDE	pteyear	Y	
000050-00-0	FORMALDEHYDE	pteyear	Y	
007782-42-5	GRAPHITE	pteyear	A	
0NY100-00-0	HAP	pteyear	A	
007440-59-7	HELIUM HE	pteyear	A	
000110-54-3	HEXANE	pteyear	Y	
007647-01-0	HYDROGEN CHLORIDE	pteyear	Y	
007664-39-3	HYDROGEN FLUORIDE	pteyear	Y	
007783-06-4	HYDROGEN SULFIDE	pteyear	A	
007439-89-6	IRON	pteyear	A	



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000067-63-0	ISOPROPYL ALCOHOL	pteyear		A	
007439-92-1	LEAD	pteyear		Y	
001309-48-4	MAGNESIUM OXIDE	pteyear		A	
007439-96-5	MANGANESE	pteyear		Y	
007439-97-6	MERCURY	pteyear		Y	
000124-40-3	METHANAMINE,N-METHYL- C2H7N	pteyear	pteyear		A
000075-63-8	METHANE, BROMOTRIFLUORO- CBRF3	pteyear	pteyear		A
000075-69-4	METHANE, TRICHLOROFLUORO-	pteyear	pteyear		A
000075-75-2	METHANESULFONIC ACID	pteyear		A	
000067-56-1	METHYL ALCOHOL	pteyear		Y	
000078-93-3	METHYL ETHYL KETONE	pteyear		Y	
064742-95-6	NAPHTHA, LIGHT AROMATIC	pteyear		A	
007440-02-0	NICKEL METAL AND INSOLUBLE COMPOUNDS		pteyear		Y
007697-37-2	NITRIC ACID	pteyear		A	
0NY210-00-0	OXIDES OF NITROGEN	pteyear			
002238-07-5	OXIRANE, 2,2'- OXYBIS(METHYLENENE) BIS-	pteyear	pteyear		A
002426-08-6	OXIRANE,(BUTOXYMETHYL)- (9CI)		pteyear		A
0NY075-00-0	PARTICULATES	pteyear			
000540-84-1	PENTANE, 2,2,4-TRIMETHYL-	pteyear		Y	
000094-36-0	PEROXIDE, DIBENZOYL	pteyear		A	
000108-95-2	PHENOL	pteyear		Y	
007664-38-2	PHOSPHORIC ACID	pteyear		A	
0NY075-00-5	PM-10	pteyear			
001310-58-3	POTASSIUM HYDROXIDE	pteyear		A	
000103-11-7	PROPENOIC ACID, 2-ETHYLHEXYL ESTER		pteyear		A
0NY120-00-0	RADIOACTIVE SOLIDS	pteyear		A	
000409-21-2	SILICON CARBIDE	pteyear		A	
007440-22-4	SILVER	pteyear		A	
001310-73-2	SODIUM HYDROXIDE	pteyear		A	
021651-19-4	STANNOUS OXIDE (TIN OXIDE)		pteyear		A
000100-42-5	STYRENE	pteyear		Y	
007446-09-5	SULFUR DIOXIDE	pteyear			
007664-93-9	SULFURIC ACID	pteyear		A	
010192-30-0	SULFUROUS ACID, MONOAMMONIUM SALT		pteyear		A
013463-67-7	TITANIUM DIOXIDE	pteyear		A	
000108-88-3	TOLUENE	pteyear		Y	
000112-24-3	TRIETHYLENE TETRAMINE	pteyear		A	
007440-62-2	VANADIUM	pteyear		A	
0NY998-00-0	VOC	pteyear			
001330-20-7	XYLENE, M, O & P MIXT.	pteyear		Y	
001314-13-2	ZINC OXIDE (FUME)	pteyear		A	

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### 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		76	Powers and Duties of the Department with respect to air pollution control
FACILITY Significant	40CFR 52-A.21	32, 33, 34, 35, 36, 37, 38	Prevention of Deterioration
U-61006	40CFR 52-A.21	50	Prevention of Significant Deterioration
U-61007 Significant	40CFR 52-A.21	54, 55, 56, 57, 58, 59, 60	Prevention of Deterioration
FACILITY	40CFR 60-Db.42b	39	Deterioration Standard for Sulfur Dioxide Firing Coal and/or Oil.
U-61007/-/SF7	40CFR 60-Db.43b(b)	63	Standard for Particulate Matter Firing Oil.
U-61007	40CFR 60-Db.43b(f)	61	Standard for Particulate Matter Opacity.
U-61006/-/SF5	40CFR 60-Db.44b(a) (1)	52	Standard for Nitrogen Oxides Firing Natural Gas and Distillate Oil. (see narrative)
U-61006/-/SF6	40CFR 60-Db.44b(a) (1)	53	Standard for Nitrogen Oxides Firing Natural Gas and Distillate Oil. (see narrative)
U-61007/-/SF8	40CFR 60-Db.44b(a) (1)	64	Standard for Nitrogen Oxides Firing Natural Gas and Distillate Oil. (see narrative)
U-61007/-/SF9	40CFR 60-Db.44b(a) (1)	65	Standard for Nitrogen Oxides Firing Natural Gas and Distillate Oil. (see narrative)
FACILITY	40CFR 60-Db.48b(f)	40, 41	Emission Monitoring for Particulate Matter and Nitrogen Oxides.
FACILITY	40CFR 60-Db.49b(e)	42	Reporting and Recordkeeping Requirements.
U-COILS	40CFR 60-TT	66	Metal Coil Surface Coating



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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	77	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, 43, 44	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) (1)	24	Alternate operating scenarios
FACILITY	6NYCRR 201-6.5 (f) (2)	25	
FACILITY	6NYCRR 201-6.5 (f) (6)	17	
FACILITY	6NYCRR 202-1.1	18	
FACILITY	6NYCRR 202-2.1	6	Emission Statements - Applicability
FACILITY	6NYCRR 202-2.5	7	Emission Statements - record keeping requirements.
FACILITY	6NYCRR 211.2	78	General Prohibitions - air pollution prohibited.
FACILITY	6NYCRR 211.3	19	General Prohibitions - visible emissions limited
FACILITY	6NYCRR 215	8	
FACILITY	6NYCRR 225-1.2 (d)	26	Sulfur-in-fuel limitations - Table 2
FACILITY	6NYCRR 225-2.7	27	Reports, sampling and analysis of waste fuels A and B.
FACILITY	6NYCRR 225-3.3 (a)	28	RVP Limitation - May 1st through September 15th
U-METAL	6NYCRR 226.2 (f)	72	General requirements- no cleaning of absorbent materials
U-METAL	6NYCRR 226.2 (g)	73	General Requirements-cold cleaning record keeping
U-METAL	6NYCRR 226.3 (a) (4)	74	Equipment specification-cold cleaning; 1.0 mm Hg vapor pressure



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U-61005	6NYCRR 227.2 (b) (1)	45, 46	
U-61006	6NYCRR 227.2 (b) (1)	49	
FACILITY	6NYCRR 227-1.3 (a)	29	Smoke Emission Limitations.
U-61005/-/SF1	6NYCRR 227-2.4 (b) (1)	47	Control Requirements for large boilers which are not case by case.
U-61006/-/SF4	6NYCRR 227-2.4 (b) (1)	51	Control Requirements for large boilers which are not case by case.
U-61007/-/SF7	6NYCRR 227-2.4 (b) (1)	62	Control Requirements for large boilers which are not case by case.
U-61005/6101A/SF1	6NYCRR 227-2.4 (c) (2)	48	Emission limitations for mid-sized boilers firing gas, distillate or residual fuels.
FACILITY	6NYCRR 227-2.6 (b)	30	
FACILITY	6NYCRR 227-2.6 (b) (3) (vi)	31	
U-PAINT	6NYCRR 228.3 (a)	75	Recordkeeping, reports for VOCs
U-FUELS	6NYCRR 230.2 (k)	67, 68, 69, 70	
U-LITHO/-/LP1	6NYCRR 234.3 (b) (2)	71	control requirements - offset lithographic printing

**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 NATIONAL LABORATORY has been determined to be subject to the following regulations:

40CFR 52-A.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) .

40CFR 60-Db.42b

40 CFR 60-Db.42b(j) allows for the use of very low sulfur oil in lieu of meeting the percent reduction requirements of 40 CFR 60-Db.42b. While 40 CFR 60-Db.42b is only applicable to Boiler #7, all the units at the central steam facility share a common fuel supply.

40CFR 60-Db.43b (b)



This regulation establishes particulate matter emission limit of 0.10 lb/million btu heat input for oil-fired combustion sources in emission unit 61007 . This would supercede the SIP PM limitof 6NYCRR 227.2(b)(1)

40CFR 60-Db.43b (f)

This regulation specifies maximum allowable opacity for affected affected sources. The opacity of the emission may not exceed 20%, except for one six minute period when the maximum opacity may not exceed 27%.

40CFR 60-Db.44b (a) (1)

These standards apply to all boilers firing natural gas and/or distillate oil except as provided in 40 CFR 60.44b(a)(4) Duct Burners Used in a Comdined Cycle System.

40CFR 60-Db.48b (f)

This regulation requires that standby methods of obtaining minimum emissions data for oxides of nitrogen be specified by the source owner or operator.

40CFR 60-Db.49b (e)

§ 60.49b(e) Reporting and recordkeeping requirements for Industrial-Commercial-Institutional Steam Generating Units.

For an affected facility that combusts residual oil the owner or operator shall maintain records of the nitrogen content of the residual oil combusted in the affected facility and calculate the average fuel nitrogen content for the reporting period. The nitrogen content shall be determined using ASTM Method D3431–80, Test Method for Trace Nitrogen in Liquid Petroleum Hydrocarbons (IBR-see §60.17), or fuel suppliers. If residual oil blends are being combusted, fuel nitrogen specifications may be prorated based on the ratio of residual oils of different nitrogen content in the fuel blend.

40CFR 60-TT

40CFR60 Subpart TT, the federal New Source Performance Standard for Metal Coil Surface Coating, limits the emissions of volatile organic compounds from facilities constructed, modified or reconstructed since January 5, 1981. Compliance can be achieved either through the use of compliant coatings or by the use of emission control equipment.

6NYCRR 201-6.5 (f) (1)

This regulation defines, in general terms, the operational flexibility provisions associated with alternate operating scenarios. Alternate operating scenarios refer to a range of operating conditions which are defined in the permit and which allow the source the flexibility to make specified changes without requiring a permit revision. These changes cannot violate any applicable requirement and must be tracked and recorded in a log at the source.

6NYCRR 201-6.5 (f) (2)

This regulation defines, in general terms, the protocol component of the operational flexibility provisions. Protocols are to specify how proposed compliance changes are to evaluated with respect to applicable requirements and in particular Part 212. This regulation requires the protocol to include provisions for notifying the Department of changes, assessing control requirements, determining compliance with applicable rules and maintaining the source inventory.

6NYCRR 225-1.2 (d)

The sulfur-in-fuel limitations for residual and distillate oil and for solid fuel are listed in Tables 1,2 and 3 or 6 NYCRR Part 225-1.2(c), (d) and (e)

6NYCRR 225-2.7

This Subpart applies to the use of and trade in liquid and semi-liquid waste fuel to be burned for energy recovery. The commissioner may require the owner and/or operator of an air contamination source burning waste fuel



regulated under section 225-2.4 of this Subpart to: (1) sample, analyze and measure quantities of all waste fuel received and/or burned; (2) monitor emissions and/or operations; and (3) maintain records of quantities of waste fuel B received and the names and addresses of waste fuel suppliers for three calendar years.

6NYCRR 225-3.3 (a)

This regulation prohibits a person from selling or supplying gasoline to a retailer or wholesale purchaser-consumer, having a Reid vapor pressure greater than 9.0 pounds per square inch (psi) as sampled and tested by methods acceptable to the commissioner, during the period May 1st through September 15th of each year beginning 1989.

6NYCRR 226 .2 (f)

The regulation prohibits a person conducting solvent metal cleaning from cleaning sponges, fabric, wood, leather, paper products and other absorbent materials in a degreaser;

6NYCRR 226 .2 (g)

This regulation requires that a person conducting solvent metal cleaning must retain a record of the following three items for five years and provide these records to the department upon request. An invoice, a bill of sale, a certificate covering multiple sales, a material safety data sheet (MSDS), or other appropriate documentation acceptable to the department may be used to comply with this requirement: (1) the name and address of the solvent supplier; (2) the type of solvent including the product or vendor identification number; and (3) the vapor pressure of the solvent measured in mm Hg at 20°C (68°F).

6NYCRR 226 .3 (a) (4)

This regulation requires that, for cold cleaning degreasing when the internal volume of the machine is greater than two gallons, solvent with a vapor pressure of 1.0 mm Hg, or less, at 20°C, be used.

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 227-1.3 (a)

This regulation prohibits any person from operating a stationary combustion installation which emits smoke equal to or greater than 20% opacity except for one six-minute period per hour of not more than 27% opacity.

6NYCRR 227-2.4 (b) (1)

This paragraph provides a table for gas only, gas and/or oil firing capable, pulverized coal, and overfeed stoker emission limits. Compliance is determined by a stack test.

6NYCRR 227-2.4 (c) (2)

This regulation requires mid-size boilers (fuel combustion units with a maximum heat input capacity greater than 50 million Btu per hour and equal to or less than 100 million Btu per hour that produce steam or heats water or any other heat transfer medium) to meet the following emission limits (listed in pounds NOx per million Btu) by May 31, 1985:

for Gas fuel -	0.10
for Distillate Oil -	0.12
for Residual Oil -	0.30

Compliance with these emission limits are determined with a 1-hour average in accordance with section 227-2.6(a)(4). If CEMs are used to determine compliance, the requirements of 227-2.6(b) apply, including the use of a 24-hour averaging period.

6NYCRR 227-2.6 (b)

Any owner or operator of a combustion source subject to reasonably available control technology (RACT) requirements, under this subdivision, for NOx and either is required or opts to employ a continuous emissions



monitoring system (CEMS) must:

- 1) Submit a CEMS monitoring plan for approval by the Department,
- 2) Submit a CEMS certification protocol,
- 3) Meet CEMS monitoring requirements as detailed in this paragraph of this subdivision, and
- 4) Meet CEMS recordkeeping and reporting requirements as detailed in this paragraph of this subdivision.

6NYCRR 227-2.6 (b) (3) (vi)

Any owner or operator of a combustion source subject to reasonably available control technology (RACT) requirements, under this subdivision, for NOx and either is required or opts to employ a continuous emissions monitoring system (CEMS) must perform annual recertifications, quarterly accuracy, and daily calibration drift tests

6NYCRR 228 .3 (a)

This regulation prohibits facilities with surface coating operations from using coatings that exceed the maximum permitted pounds of VOC per gallon, minus water and excluded VOC at application specified in table 1 of section 228.7 or table 2 of section 228.8 of this Part, unless a coating system meeting the requirements of subdivision (d) of this section is utilized, control equipment meeting the requirements of subdivisions (b) and (c) of this section is installed and operated, or a process specific RACT variance is granted under subdivision (e) of this section.

6NYCRR 230 .2 (k)

This regulation requires the owners and/or operators of stage II systems to perform dynamic pressure tests at 5 year intervals after commencing operations. The leak test criteria requirements are given in 6 NYCRR Part 230.2(k).

6NYCRR 234 .3 (b) (2)

The facility began operation on or after September 1, 1988. An offset lithographic printing process is used at the facility which is subject to Part 234, and which uses fountain solutions containing volatile organic compounds containing 10% by weight or less of volatile organic compounds.

In addition, an air cleaning device must be used in which 90% of the volatile organic compounds are removed from the exhaust stream.

**Compliance Certification**

Summary of monitoring activities at BROOKHAVEN NATIONAL LABORATORY:

Location Facility/EU/EP/Process/ES	Cond No.	Type of Monitoring
FACILITY	32	record keeping/maintenance procedures
FACILITY	33	work practice involving specific operations
FACILITY	34	work practice involving specific operations
FACILITY	35	work practice involving specific operations
FACILITY	36	work practice involving specific operations
FACILITY	37	work practice involving specific operations
FACILITY	38	work practice involving specific operations
U-61006	50	continuous emission monitoring (cem)
U-61007	54	work practice involving specific operations
U-61007	55	monitoring of process or control device parameters as



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U-61007	56	surrogate monitoring of process or control device parameters as surrogate
U-61007	57	monitoring of process or control device parameters as surrogate
U-61007	58	continuous emission monitoring (cem)
U-61007	59	continuous emission monitoring (cem)
U-61007	60	work practice involving specific operations
FACILITY	39	work practice involving specific operations
U-61007/-/SF7	63	intermittent emission testing
U-61007	61	monitoring of process or control device parameters as surrogate
U-61006/-/SF5	52	continuous emission monitoring (cem)
U-61006/-/SF6	53	continuous emission monitoring (cem)
U-61007/-/SF8	64	continuous emission monitoring (cem)
U-61007/-/SF9	65	continuous emission monitoring (cem)
FACILITY	41	record keeping/maintenance procedures
FACILITY	42	work practice involving specific operations
U-COILS	66	record keeping/maintenance procedures
FACILITY	5	record keeping/maintenance procedures
FACILITY	23	record keeping/maintenance procedures
FACILITY	6	record keeping/maintenance procedures
FACILITY	26	work practice involving specific operations
FACILITY	27	record keeping/maintenance procedures
FACILITY	28	work practice involving specific operations
U-61005	45	intermittent emission testing
U-61005	46	intermittent emission testing
U-61006	49	intermittent emission testing
FACILITY	29	monitoring of process or control device parameters as surrogate
U-61005/-/SF1	47	monitoring of process or control device parameters as surrogate
U-61006/-/SF4	51	continuous emission monitoring (cem)
U-61007/-/SF7	62	continuous emission monitoring (cem)
U-61005/6101A/SF1	48	intermittent emission testing
FACILITY	30	record keeping/maintenance procedures
U-FUELS	67	monitoring of process or control device parameters as surrogate
U-FUELS	68	monitoring of process or control device parameters as surrogate
U-FUELS	69	record keeping/maintenance procedures
U-FUELS	70	monitoring of process or control device parameters as surrogate
U-LITHO/-/LP1	71	work practice involving



specific operations

**Basis for Monitoring**

6NYCRR 202-1.1- This regulation requires stack testing once during the permit term. NOx testing for emission unit 61005 and Particulates testing for emission unit 61007.

6NYCRR 225-1.2 -This regulation requires monitoring of the amount of sulfur present in the #2 fuel oil burned at the Central Steam Facility. The sulfur content must not exceed 0.5% by weight.

6NYCRR 227-1.3(a)-This regulation requires Method 9 monitoring of opacity from stationary combustion installations which emits smoke. The opacity limit is 20% except for one six-minute period per hour of not more than 27% opacity.

NYCRR Part 230.2(k).-This regulation requires the owners and/or operators of stage II systems to perform dynamic pressure tests at 5 year intervals after commencing operations.

6NYCRR 234 .3 (b)-This regulation requires offset lithographic printing process, which is subject to Part 234 (began operation on or after September 1, 1988) and which uses fountain solutions containing volatile organic compounds, to use fountain solutions containing 10% by weight or less of volatile organic compounds.

40CFR52.21, Subpart A -This regulation requires continuous NOx emission monitoring for emission units 61006 and 61007. Also requires continuous Opacity monitoring for emission unit 61007.