New York State Department of Environmental Conservation

Permit Review Report

Permit IDModification Number: 1 **12/19/2002**

Facility Identification Data
Name: BROOKHAVEN NATIONAL LABORATORY
Address: 53 BELL AVE
City: UPTON
Zip: 11973

Owner/Firm
Name: U S DEPT OF ENERGY
City: WASHINGTON
State: DC Country: USA Zip: 20585
Owner Classification: Federal

Permit Contacts
Division of Environmental Permits:
Name: MARK CARRARA
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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
ermit have an
accompanying "...statement that sets forth the legal and factual basis for the draft permit conditions". The purpose for
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
BROOKHAVEN NATIONAL LABORATORY IS SUBMITTING THIS MINOR PERMIT MODIFICATION IN ACCORDANCE WITH REQUIREMENTS OF 6 NYCRR 201-6.7(c). MINOR MODIFICATIONS REQUESTED INCLUDE MOVING EMISSION UNIT U-19708 FROM BLDG 197 TO BLDG 902 AND RENAMED AS U-COILS, REMOVAL OF EMISSION UNITS U-49001 & U-LEADM, MINOR MONITORING CONDITION CHANGES ON U-61005 & U-61006 AND MINOR CHANGES TO U-METAL.

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 < 10µ in diameter (PM10)	ATTAINMENT
Sulfur Dioxide (SO2)	ATTAINMENT
Ozone*	SEVERE NON-ATTAINMENT
Oxides of Nitrogen (NOx)**	ATTAINMENT
Carbon Monoxide (CO)	ATTAINMENT

l/or oxides of nitrogen (NOx) which are ozone precursors.

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

y Description

BNL IS A GOVERNMENT OWNED CONTRACTOR OPERATED RESEARCH FACILITY. THE LABORATORY WAS MANAGED BY ASSOCIATED UNIVERSITIES INC. (AUI). SINCE MARCH 1998,THE LABORATORY HAS BEEN MANAGED BY BROOK HAVEN 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 NOX REASONABLE AVAILABLE CONTROL TECHNOLOGY REQUIREMENTS. THE LABORATORY IS ALSO SUBJECT TO NESHAPS SUBPART H PROVISIONS BECAUSE IT OPERATES SOURCES AUTHORIZED BY USEPA, WHICH EMIT RADIO NUCLIDES. 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 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 U61006 - THIS EMISSION UNIT LOCATED IN BUILDING 610 CONSISTS OF ONE COMMERCIAL-INSTITUTIONAL SIZED BOILER (BOILER 6) WITH ITS OWN SEPARATE 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% AND A FUEL SULFUR 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 SULFUR AND NITROGEN CONTENTS BELOW 0.3% SULFUR & 0.3% NITROGEN 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. THE MORE STRINGENT NSPS SUBPART DB NOX LIMIT OF 0.20 LBS/MMBTU APPLIES WHEN NATURAL GAS IS COMBUSTED.
Process: SF6 is located at Building 610 - BURNING OF DISTILLATE OIL IN BOILER 6. THE MORE STRINGENT NSPS SUBPART DB NOX LIMIT OF 0.20 LBS/MMBTU APPLIES WHEN DISTILLATE OIL IS COMBUSTED.

Emission unit U49003 - BLOCK SHIELDING IS FABRICATED ON SITE FOR PATIENTS WHO RECEIVE TREATMENT AT THE RADIATION THERAPY FACILITY IN BUILDING 490. THE SHIELDING IS USED TO SHADOW AREAS OF THE BODY AGAINST UNDESIRABLE RADIATION FROM THE TREATMENT (RTF). THE SHIELDING IS A CERROBEND/OSTALLOY ALLOY TYPICALLY CONSISTING OF BISMUTH, LEAD, CADMIUM,AND TIN. THE SHIELDING FABRICATION PROCESS INVOLVES A FEW DIFFERENT STEPS. AFTER TRACING A RADIOGRAPH OF THE PATIENT'S PLANNED IRRADIATION AREA, AN AUTOMATED HOT WIRE TOOL CUTS A POLYSTYRENE BLOCK TO FORM A PRE-SHAPED MOLD. THE CERROBEND OSTALLOY LEAD ALLOY IS MELTED IN THE MELTING POT AND POURED DIRECTLY INTO THE PRE-SHAPED POLYSTYRENE MOLD. SCREWS AND A PLASTIC CASSETTE ARE TYPICALLY USED TO SECURE THE ALLOY TO THE MOLD BEFORE THE CERROBEND ALLOY HARDENS. AFTER THE ALLOY HAS HARDENED, THE POLYSTYRENE MOLD IS DETACHED FROM THE ALLOY MOLD LEAVING THE ALLOY SECURED TO THE CASSETTE. EMISSIONS FROM THE MELTING POT

ARE EXHAUSTED THROUGH EMISSION POINT 49004. BLOCK CUTTER EMISSIONS ARE EXHAUSTED THROUGH EMISSION POINT 49003.
Emission unit U49003 is associated with the following emission points (EP):
49003, 49004
It is further defined by the following process(es):
Process: BS1 is located at Building 490 - FABRICATION OF BLOCK SHIELDING WHICH INCLUDES ALLOY MELTING & POLYSTYRENE BLOCK FORMING.

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 SMALL SCALE OPERATION IN BLDG902 WHERE MAGNET END BLOCKS ARE ETCHED WITH A DILUTE NITRIC ACID AND SMALL QUANTITIES OF A THERMOSETTING INSULATING VARNISH ARE SPRAY APPLIED TO THE BLOCK ENDS. EVAPORATIVE EMISSIONS FROM THIS OPERATION ARE RELEASED TO A STACK (EMISSION POINT 90206). THE UNIT INCLUDES A MAGNET COIL PRODUCTION PRESS. EMISSIONS OF 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). 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 IS A RATHER COMPLEX PROCESS WHICH 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 AS THEY ARE IMMERSED IN A TIN 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 EFFECTIVELY REDUCING THE SOLUTION 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 SU RFACE 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% VOLUME WATER, 0.999% VOLUME POTASSIUM CARBONATE AND 0.001% VOLUME ANTI FOAMING AGENT. SINCE THE AQUEOUS FORMULA HAS BEEN 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 AFTER BOARDS ARE REMOVED FROM THE COPPER PLATING BATH. EMISSIONS FROM THIS SOURCE ARE LIMITED TO AMMONIUM HYDROXIDE AND TRACE EMISSIONS OF AMMONIUM CHLORIDE AND COPPER CHLORIDE WHICH ARE RELEASED THROUGH EMISSION POINT 53502. THE AGGREGATE ANNUAL EMISSIONS FROM THE SOURCES AND OPERATIONS COVERED UNDER THIS EMISSION UNIT ARE LESS THAN ATHE THRESHOLDS ESTABLISHED IN 6 NYCRR 201-6.3(d) FOR INSIGNIFICANT EMISSION UNITS.
Emission unit UINSIG is associated with the following emission points (EP):
01AMB, 53501, 53502, 53503, 92204, 92401, 92402
It is further defined by the following process(es):
Process: IN1EIGHT DIFFERENT PERMITTED EMISSION SOURCES WHOSE COMBINED EMISSIONS ARE INSIGNIFICANT.

Emission unit UFUELS - THIS EMISSION UNIT INCLUDES TWO ON-SITE GASOLINE REFUELING FACILITIES. THE FIRST 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, MEDIUM AND HIGH 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 SECOND 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 IN 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 - IF NYSDEC INVOKES CARBON MONOXIDE CONTINGENCY MEASURES, THE MAXIMUM REID VAPOR PRESSURE OF GASOLENE DISPENSED FROM 10/1 TO 3/31 SHALL NOT EXCEED 13.5 PSI AND FROM 5/1 TO 9/15 REID VAPOR PRESSURE SHALL NOT EXCEED 9.0 PSI.

Emission unit UMVACS - BNL OPERATES A FLEET OF APPROXIMATELY 336 VEHICLES. THESE VEHICLES ARE SERVICED AT THE AUTOMOTIVE SERVICE SHOP IN BLDG 423. THIS EMISSION UNIT COVERS FLEET VEHICLES EQUIPPED WITH AIR CONDITIONERS CHARGED WITH R-12 OR WITH R-134A. THIS EMISSION UNIT COVERS AUTOMOTIVE SERVICE SHOP ACTIVITIES ASSOCIATED WITH THE SERVICE AND REPAIR TO FLEET AIR CONDITIONING EQUIPMENT. THIS UNIT INCLUDES REFRIGERANT RECOVOERY/RECYCLING DEVICES THAT CAN BE USED WITH R-12 AND R-134A MOTOR VEHICLE AIR CONDITIONERS. THIS EMISSION UNIT IS SUBJECT TO PROVISIONS OF 40 CFR 82 SUBPART B ENTITLED SERVICING OF MOTOR VEHICLE AIR CONDITIOINERS (MVACS) AND TO PROVISIONS OF 40 CFR 82 SUBPART F THAT ARE APPLICABLE TO THE OF MVACS.
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 REFRIGERANT RECOVERY/RECYCLING DEVICE IS CERTIFIED TO MEET THE STANDARDS SET FORTH IN 40 CFR 82 SUBPART B APPENDIX A. SERVICE TECHNICIANS AT THE AUTOMOTIVE REP AIR SHOP 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 REFRIGERANT RECOVERY/RECYCLING DEVICE IS USED TO RECOVER AND RECYCLE R-134A. SERVICE TECHNICIANS AT THE AUTOMOTIVE REP AIR SHOP HAVE PASSED CERTIFICATION TRAINING AS PER SECTION 82.40.

Emission unit U61007 - THIS EMISSION UNIT LOCATED IN BUILDING 610 CONSISTS OF ONE COMMERCIAL-INSTITUTIONAL SIZED BOILER (BOILER 7) WITH ITS OWN SEPARATE 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 A DUAL FUEL BURNER WHICH ENABLE IT TO BURN OIL OR NATURAL GAS. BECAUSE CONSTRUCTION OF BOILER 7 COMMENCED AFTER JUNE 19, 1986, THIS BOILER IS SUBJECT TO THE NITROGEN OXIDE STANDARDS AND PARTICULATE STANDARDS OF SUBPART Db. COMPLIANCE WITH THE EMISSION STANDARDS IS ACHIEVED THROUGH THE USE OF LOW NOX BURNERS AND AN OVER FIRE AIR NOX REDUCTION SYSTEM. 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 PARTICULATE EMISSION STANDARD IS 0.10 LBS/MMBTU. 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 NITROGEN OXIDE (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 OIL AND NATURAL GA S, 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 225-2.4 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. NO. 6 OIL WITH LOW VOLUMES OF WASTE OIL BURNED IN 147 MMBTU/HR PACKAGE BOILER, SUBJECT TO NSPS SUBPART DB NOX & OPACITY LIMITS AND PART 227-2 NOX LIMIT. NO. 6 OIL GUARANTEED AT OR BELOW 0.3% SULFUR & 0.3% NITROGEN BY SUPPLIER.
Process: SF8 is located at Building 610 - BURNING OF NATURAL GAS IN BOILER 7. THE MORE STRINGENT NSPS SUBPART DB NOX LIMIT OF 0.20 LBS/MMBTU APPLIES WHEN NATURAL GAS IS COMBUSTED.
Process: SF9 is located at Building 610 - BURNING OF DISTILLATE OIL IN BOILER 7. THE MORE STRINGENT NSPS SUBPART DB NOX LIMIT OF 0.20 LBS/MMBTU APPLIES WHEN DISTILLATE OIL IS COMBINED.

Emission unit URFRIG - THIS UNIT COVERS ALL REFRIGERANT RECOVERY, RE CYCLING 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 RE CYCLING REQUIREMENTS FOR REFRIGERATION AND AIR CONDITIONING EQUIPMENT AND APPLIANCES. THIS UNIT ALSO COVERS VARIOUS PIECES OF COMMERCIAL REFRIGERANT EQUIPMENT UTILIZED IN BUILDING 30 AND 488 THAT ARE SERVICED BY AN OUTSIDE CONTRACTOR.
It is further defined by the following process(es):
Process: RC1THIS PROCESS COVERS BNL APPLIANCES NORMALLY CONTAINING LESS THAN 50 LBS OF REFRIGERANT. REFRIGERANT RECOVERY AND RE CYCLING

EQUIPMENT USED BY BNL CERTIFIED TECHNICIANS TO SERVICE COVERED EQUIPMENT MEETS THE LEVELS OF EVACUATION ESTABLISHED BY EPA AS NOTED THIS PROCESS COVERS BNL APPLIANCES NORMALLY CONTAINING LESS THAN 50 LBS OF REFRIGERANT. REFRIGERANT RECOVERY AND RE CYCLING 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 24 RECIPROCAL CHILLERS, 192 SPLIT UNITS AND 243 PACKAGE UNITS. IN SECTION 82.158. INCLUDES 24 RECIPROCAL CHILLERS, 192 SPLIT UNITS AND 243 PACKAGE UNITS. THE NUMBER OF UNITS IS SUBJECT TO CHANGE AS BNL ADDS NEW EQUIPMENT OR REPLACES OLD EQUIPMENT.
Process: RC2THIS 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 14 RECIPROCAL, 21CENTRIFUGAL AND 4 ROTARY CHILLERS, 1 SPLIT AND 2 PACKAGE UNITS. THE NUMBER OF UNITS IS SUBJECT TO CHANGE AS BNLADDS NEW EQUIPMENT OR REPLACES OLD EQUIPMENT.

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 NOX RACT EMISSION STANDARD OF 6 NYCRR PART 227-2 IS ACHIEVED BY BURNING RESIDUAL FUEL WITH A LOW FUEL- BOUND NITROGEN CONTENT. THE NOX 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% AND A FUEL SULFUR 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, NOX 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 NOX

EMISSION FACTOR FOR UNCONTROLLED OIL FIRED BOILERS (24 LBS/1000 GALS), NOX EMISSIONS FROM BOILER 5 WOULD BE APPROXIMATELY 0.163 LBS/MMBTU. EMISSION TESTING OF BOILER 1A USING EPA REFERENCE METHODS WOULD BE NECESSARY TO ENSURE COMPLIANCE WITH THE NOX RACT STANDARD OF 0.12 LBS/MMBTU, IF THE DECISION WERE MADE TO BURN DISTILLATE OIL.
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. BOILERS 1A AND 5 BURN MOSTLY NO. 6 OIL. LOW VOLUMES OF WASTE OIL ARE SOMETIMES MIXED IN. BOTH BOILERS ARE SUBJECT TO PART 227-2 NOX LIMITS. NO. 6 OIL IS GUARANTEED AT OR BELOW 0.3% WT. SULFUR & 0.3% WT. NITROGEN BY THE SUPPLIER.
Process: SF2 is located at Building 610 - BURNING OF NATURAL GAS IN BOILER 5. PART 227-2 NOX 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. IF BNL SHOULD DECIDE TO BURN DISTILLATE OIL IN BOILER 1A, STACK TESTING WILL BE NEEDED TO ENSURE COMPLIANCE W/PART 227-3 NOX LIMIT OF 0.12 LBS/MMBTU.

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 TW0-PART EPOXY ADHESIVES.

Emission unit UMETAL - COLD CLEANING OF METAL PARTS AT VARIOUS SITE LOCATIONS. UNIT CONSISTS OF 3 IMMERSION CLEANING TANKS IN BLDG. 423 (ALL INTERNALLY VENTED), 1 IMMERSION CLEANING TANK IN BLDG 473 (INTERNALLY VENTED), 1 SPRAY CLEANING TANK IN BLDG. 479 (VENTED INTERNALLY), 1 IMMERSION CLEANING TRAY IN BLDG. 610 (INTERNALLY VENTED), 1 IMMERSION CLEANING TANK IN BLDG 820 (INTERNALLY VENTED), 1 HOSE APPLIED PARTS CLEANING TANK IN BLDG 903 (INTERNALLY VENTED), 1 IMMERSION CLEANING AND 1 SMALL HAND WIPE CLEANING TANK INN BLDG 922 (BOTH INTERNALLY VENTED), 1 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 TWO INACTIVE PARTS CLEANING OPERATIONS: A LARGE DETREX VAPOR DEGREASER LOCATED IN BLDG 479 (EMISSION POINT 47907) AND AN INTERNALLY VENTED VAPOR/ULTRASONIC DEGREASING UNIT IN BLDG 207 THAT CAN BE USED TO CLEAN COILED CABLES. IF THE DETREX VAPOR DEGREASER IS RETURNED TO SERVICE, PLANS ARE TO USE IT FOR IMMERSION CLEANING OF LARGE METAL PARTS USING AN AQUEOUS CLEANER.
Emission unit UMETAL is associated with the following emission points (EP):
49801, 92301
It is further defined by the following process(es):
Process: SM1SEVERAL METAL PARTS CLEANING OPERATIONS SUBJECT TO PART 226 PROVISIONS FOR COLD CLEANING DEGREASING. SOME OF THE CLEANING SOLUTIONS USED ARE SAFETY KLEEN PREMIUM GOLD, LPS A-151 CLEANER DEGREASER, LPS PRESOLVE CLEANER, ZEPRIDE - E CLEANER AND BUFF-OFF 16000. ALL OF THESE CLEANING SOLUTIONS HAVE VAPOR PRESSURES LESS THAN 33MM HG @ 100 F.

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 (EQ 19709) 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 (EQ 19710) WAS INSTALLED IN 1995. THE FOUNTAIN SOLUTION USED IN THE TWO OFFSET PRINTERS ARE SUBJECT TO 6 NY CRR PART 234 VOC LIMITS. THE VOC CONTENTS OF 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 902 - LITHOGRAPHIC OFFSET PRINTING WITH SPRINT 26 & A.B. DICK PRESSES. THE SPRINT 26 FOUNTAIN SOLUTION IS MADE W/5 GALS H2O & 15 OUNCES EACH OF 2 WETTING AGENTS. A.B. DICK PRESS TANK FILLED WITH 0.25 GALS H2O AND EQUAL PARTS OF 2 WETTING AGENTS (15 MI EACH). VO C CONTENT OF PRESS FOUNTAIN SOLUTIONS IS <10 & WT.

Emission unit U45801 - THIS EMISSION UNIT IS LOCATED IN BUILDING 458 AND CONSISTS OF A SPRAY BOOTH (EMISSION POINT 45801) AND TWO PAINT STORAGE CABINETS (458AA) BOTH INTERNALLY VENTED. COMPLIANCE WITH 6 NYCRR PART 228 PROVISIONS IS MAINTAINED THROUGH THE USE OF VOC COMPLIANT COATINGS. RECORDS OF ALL COATING AND THINNER USAGE AND THE SUBSTRATES TO WHICH THEY ARE APPLIED ARE MAINTAINED BY PLANT ENGINEERING'S PAINT SHOP SUPERVISOR.
Emission unit U45801 is associated with the following emission points (EP):
00AMB, 45801
It is further defined by the following process(es):
Process: PT1 is located at Building 458 - SPRAY PAINTING OF WOOD FURNITURE AND MISCELLANEOUS METAL PARTS W/VOC COMPLYING COATINGS. COMPLYING

COATINGS INCLUDE MLC POLYSTAR SATIN LACQUER, MLC POLYSTAR PRIMER/.SURFACER, MLC ULTRASTAR CLEAR LACQUER, MLC ULTRASTAR SEALER, CON-LUX RUST BARRIER RED PRIM ER, CON-LUX STEEL GUARD AND PITTSBURGH PAINT TOPCOAT & PRIMER.

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, AND PIECES OF EQUIPMENT THAT ARE USED TOGETHER TO RECOVER AND RECYCLE HALON 1301 DURING REGULAR SERVICING OF FIXED HALON 1301 FIRE SUPPRESSION SYSTEMS. THIS UNIT IS SUBJECT TO PROVISIONS OF 40 CFR PART 82 SUBPART H ENTITLED HALON EMISSIONS REDUCTION. ATTACHMENTS 3 AND 4 INCLUDED WITH THE PERMIT APPLICATION PROVIDE ADDITIONAL INFORMATION RESPECTIVELY ABOUT THE PORTABLE FIRE EXTINGUISHERS AND THE FIRE SUPPRESSION SYSTEMS COVERED BY THIS EMISSION UNIT. EMISSIONS ARE RESTRICTED TO DE MINIMAS RELEASES FROM THE HALON RECOVERY DEVICES DURING PERIODIC SERVICING OF EXTINGUISHERS AND FIRE SUPPRESSION SYSTEMS.
It is further defined by the following process(es):
Process: HR1RECOVERY AND RECYCLING OF HALON FROM PORTABLE EXTINGUISHERS AND FIXED FIRE SUPPRESSION SYSTEMS.

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. Facility is a major source for NOx., VOC, CO and SO2.The potential to emit for these pollutants are as follows: NOx 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 SO2 is above 250 tons per year.

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)	YES
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
able 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
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	Description
8922	NONCOMMERCIAL RESEARCH ORGANIZATIONS(1977)

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
3-04-004-01	SECONDARY METAL PRODUCTION SECONDARY METAL PRODUCTION - LEAD Pot Furnace
4-02-007-12	SURFACE COATING OPERATIONS SURFACE COATING APPLICATION - GENERAL SURFACE COATING APPLICATION-GENERAL: ADHESIVE:ROLL-ON
4-02-043-30	SURFACE COATING OPERATIONS SURFACE COATING OPERATIONS - FABRIC COATING, DIP COATING COATING APPLICATION
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

nal 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

e limitation is

contained in federally enforceable permit conditions. The PTE Range represents an emission range for a

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
0NY075-00-0	PARTICULATES	98400	

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

Item A: **Sealing - 6NYCRR Part 200.5**

The Commissioner may seal an air contamination source to prevent its operation if compliance with 6 NYCRR Chapter III is not met within the time provided by an order of the Commissioner issued in the case of the violation. Sealing means labeling or tagging a source to notify any person that operation of the source is prohibited, and also includes physical means of preventing the operation of an air contamination source without resulting in destruction of any equipment associated with such source, and includes, but is not limited to, bolting, chaining or wiring shut control panels, apertures or conduits associated with such source.

No person shall operate any air contamination source sealed by the Commissioner in accordance with this section unless a modification has been made which enables such source to comply with all requirements applicable to such modification.

Unless authorized by the Commissioner, no person shall remove or alter any seal affixed to any contamination source in accordance with this section.

Item B: **Acceptable Ambient Air Quality - 6NYCRR Part 200.6**

Notwithstanding the provisions of 6 NYCRR Chapter III, Subchapter A, no person shall allow or permit any air contamination source to emit air contaminants in quantities which alone or in combination with emissions from other air contamination sources would contravene any applicable ambient air quality standard and/or cause air pollution. In such cases where contravention occurs or may occur, the Commissioner shall specify the degree and/or method of emission control required.

Item C: **Maintenance of Equipment - 6NYCRR Part 200.7**

Any person who owns or operates an air contamination source which is equipped with an emission control device shall operate such device and keep it in a satisfactory state of maintenance and repair in accordance with ordinary and necessary practices, standards and procedures, inclusive of manufacturer's specifications, required to operate such device effectively.

Item D: Unpermitted Emission Sources - 6NYCRR Part 201-1.2

If an existing emission source was subject to the permitting requirements of 6NYCRR Part 201 at the time of construction or modification, and the owner and/or operator failed to apply for a permit for such emission source then the following provisions apply:

(a) The owner and/or operator must apply for a permit for such emission source or register the facility in accordance with the provisions of Part 201.

(b) The emission source or facility is subject to all regulations that were applicable to it at the time of construction or modification and any subsequent requirements applicable to existing sources or facilities.

Item E: 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 F: Recycling and Salvage - 6NYCRR Part 201-1.7

Where practical, any person who owns or operates an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of 6 NYCRR.

Item G: Prohibition of Reintroduction of Collected Contaminants to the Air - 6NYCRR Part 201-1.8

No person shall unnecessarily remove, handle, or cause to be handled, collected air contaminants from an air cleaning device for recycling, salvage or disposal in a manner that would reintroduce them to the outdoor atmosphere.

Item H: 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 I: Proof of Eligibility for Sources Defined as Exempt Activities - 6 NYCRR Part 201-3.2(a)

The owner and/or operator of an emission source or unit that is eligible to be exempt, may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source 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 which contains emission sources or units subject to 6 NYCRR Subpart 201-3, 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.

Item J: Proof of Eligibility for Sources Defined as Trivial Activities - 6 NYCRR Part 201-3.3(a)

The owner and/or operator of an emission source or unit that is listed as being trivial in 6 NYCRR Part 201 may be required to certify that it operates within the specific criteria described in 6 NYCRR

Subpart 201-3. The owner or operator of any such emission source 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 which contains emission sources or units subject to 6 NYCRR Subpart 201-3, 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.

Item K: **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 L: **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 M: **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 N: **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 O: **Providing Information Upon Request - 6 NYCRR Part 201-6.5(a)(4)**

The permittee shall furnish to the Department, within a reasonable time, any information that the Department may request in writing to

determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. The permittee shall also, on request, furnish the Department with copies of records required to be kept by the permit. Where information is claimed to be confidential, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

Item P: **Cessation or Reduction of Permitted Activity Not a Defense - 6NYCRR 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 Q: **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 R: **Fees - 6 NYCRR Part 201-6.5(a)(7)**

The owner and/or operator of a stationary source shall pay fees to the department consistent with the fee schedule authorized by 6 NYCRR Subpart 482-2.

Item S: **Right to Inspect - 6 NYCRR Part 201-6.5(a)(8)**

Upon presentation of credentials and other documents, as may be required by law, the permittee shall allow the Department or an authorized representative to perform the following:

i. Enter upon the permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

iii. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

iv. As authorized by the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

Item T: **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 U: **Progress Reports and Compliance Schedules - 6 NYCRR Part 201-6.5(d)(5)**

Progress reports consistent with an applicable schedule of compliance must be submitted at least semiannually on a calendar year basis, or at a more frequent period if specified in the applicable requirement or by the Department elsewhere in this permit. These reports shall be submitted to the Department within 30 days after the end of a reporting period. Such progress reports shall contain the following:

i. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

ii. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

Item V: **Off Permit Changes - 6 NYCRR Part 201-6.5(f)(6)**

No permit revision will be required for operating changes that contravene an express permit term, provided that such changes would not violate applicable requirements as defined under this Part or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting, or compliance certification permit terms and conditions. Such changes may be made without requiring a permit revision, if the changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions) provided that the facility provides the Administrator and the Department with written notification in advance of the proposed changes within a minimum of 7 days as required by 6 NYCRR §201-6.5(f)(6).

Item W: **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 X: 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 Y: **Required Emission Tests - 6 NYCRR Part 202-1.1**

An acceptable report of measured emissions shall be submitted, as may be required by the Commissioner, to ascertain compliance or noncompliance with any air pollution code, rule, or regulation. Failure to submit a report acceptable to the Commissioner within the time stated shall be sufficient reason for the Commissioner to suspend or deny an operating permit. Notification and acceptable procedures are specified in 6NYCRR Part 202-1.

Item Z: **Visible Emissions Limited - 6 NYCRR Part 211.3**
Except as permitted by a specific part of this Subchapter and for open fires for which a restricted burning permit has been issued, no person shall cause or allow any air contamination source to emit any material having an opacity equal to or greater than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

Item AA: **Open Fires - 6 NYCRR Part 215**
No person shall burn, cause, suffer, allow or permit the burning in an open fire of garbage, rubbish for salvage, or rubbish generated by industrial or commercial activities.

Item BB: **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 CC: **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.

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 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 201-6
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 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(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 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.

ł 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.

40 CFR Part 68.
This Part lists the regulated substances and there applicability thresholds and sets the requirements for stationary sources concerning the prevention of accidental releases of these substances.

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
ɔn 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.43b (b)
ıt for oil-fired

combustion sources in emission unit 61007 . This would supercede the SIP PM limitof 6NYCRR 227.2(b)(1)

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.

0-Db.49b (e)
This regulation requires that facilities combusting residual oil to monitor nitrogen content of oil.

40CFR 82-H.270 (c)
This rule requires that organizations that employ technicians who test, maintain, service, repair or dispose of halon-containing equipment shall be trained regarding halon emissions reduction by September 1, 1998 or within 30 days of hiring, whichever is later.

6NYCRR 201-6.5 (c) (3) (ii)
This regulation specifies any reporting requirements incorporated into the permit must include provisions
ce stating the
probable cause of such deviations, and any corrective actions or preventive
measures taken.

6NYCRR 212 .4
ew (after July
1, 1973) process emission sources.

6NYCRR 225-1.2
This regulation limits the amount of sulfur present in the fuel burned at the facility.

6NYCRR 225-2.8
a valid permit.

6NYCRR 225-3.6 (a)
This regulation sets forth the record keeping requirements for the owner or operator of any refinery, terminal, or bulk plant from which gasoline, subject to the oxygen content requirements of 6 NYCRR Part
s delivered to
or distributed from these facilities

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
r any oil fired
stationary combustion installation.

R 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.

R 227-2.4 (b)

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 227-2.6 (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 230 .2 (k)

pressure tests

at 5 year intervals after commencing operations. The leak test criteria requirements are given in 6 NYCRR Part 230.2(k).

34 .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	**Type of Monitoring**	**Cond No.**
FACILITY	record keeping/maintenance procedures	34
FACILITY	work practice involving specific operations	35
FACILITY	work practice involving specific operations	36
FACILITY	work practice involving specific operations	37
FACILITY	work practice involving specific operations	38
FACILITY	work practice involving specific operations	39
FACILITY	work practice involving specific operations	40
U-61006	continuous emission monitoring (cem)	50
U-61007	continuous emission monitoring (cem)	56
U-61007	work practice involving specific	57

	operations	
U-61007	monitoring of process or control device parameters as surrogate	58
U-61007	work practice involving specific operations	59
U-61007	monitoring of process or control device parameters as surrogate	60
U-61007	continuous emission monitoring (cem)	61
U-61007	monitoring of process or control device parameters as surrogate	62
U-61006	record keeping/maintenance procedures	51
U-61007	record keeping/maintenance procedures	64
U-61006/-/SF4	work practice involving specific operations	53
U-61007/-/SF7	work practice involving specific operations	66
U-HALON/-/HR1	record keeping/maintenance procedures	72
FACILITY	record keeping/maintenance procedures	1-3
FACILITY	record keeping/maintenance procedures	1-4
U-61005	intermittent emission testing	46
U-61007	intermittent emission testing	54
FACILITY	record keeping/maintenance procedures	28
U-49003/49003/BS1	record keeping/maintenance procedures	45
FACILITY	record keeping/maintenance procedures	32
U-61006/-/SF4	record keeping/maintenance procedures	52
U-61007/-/SF7	record keeping/maintenance procedures	65
FACILITY	record keeping/maintenance procedures	33
U-61005	intermittent emission testing	1-7
U-61006	intermittent emission testing	1-8
FACILITY	monitoring of process or control device parameters as surrogate	1-5
U-61007/61007	monitoring of process or control device parameters as surrogate	67
U-61005	record keeping/maintenance procedures	48
U-61007	record keeping/maintenance procedures	55
U-FUELS	monitoring of process or control device parameters as surrogate	68
U-FUELS	monitoring of process or control device parameters as surrogate	69
U-FUELS	record keeping/maintenance procedures	70
U-FUELS	monitoring of process or control device parameters as surrogate	71
U-LITHO/-/LP1	record keeping/maintenance procedures	74

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 227.2(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 and requires stack testing once during the permit term for emission units 61005 and 61006.

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
latile 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.
40CFR 60.43b(b),Subpart Db-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)