

GOVERNMENT OF THE DISTRICT OF COLUMBIA
Department of Energy and Environment

September 16, 2022

John Michael Bixler
Deputy Director of Facilities Management
Smithsonian Institution
1000 Constitution Avenue NW, MRC 132
Washington DC 20004

Subject: **Draft Synthetic Minor Operating Permit (Permit No. 7289-SM)**

Dear Mr. Bixler:

The Air Quality Division (AQD) of the District of Columbia Department of Energy and Environment (the Department) has prepared a Draft Synthetic Minor operating permit pursuant to Chapter 2, sections 200.2, 200.6, and 200.7 of Title 20 of the District of Columbia Municipal Regulations (20 DCMR). This permit, satisfying applicable regulations, is enclosed. Additionally, AQD has attached a Technical Support Memorandum discussing the technical and legal basis for the permit.

As the permit applicant for the equipment covered by this permit at Smithsonian Institution's National Museum of the American Indian, located at 4th & Independence Avenue SW, Washington DC, it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached and to ensure that any person who operates any emission unit subject to the attached permit does the same.

This draft permit will be subject to a 30-day public comment period beginning September 16, 2022 and continuing through October 17, 2022. AQD will respond to any comments received during this public comment period before making a final decision on the permit application. If a public hearing is requested during this time, such a hearing will be scheduled according to 20 DCMR 210.

Upon issuance of this synthetic minor permit, it will supersede and replace Title V operating permit No. 040, issued September 30, 2014.

If you have questions or comments or need further information, please write to this office or contact Abraham T. Hagos at (202) 535-1354 or abraham.hagos@dc.gov. If you are submitting comments on the draft permit or a request for a public hearing, please also submit them to me at stephen.ours@dc.gov.

Sincerely,



Stephen S. Ours, P.E.
Chief, Permitting Branch
Air Quality Division

Attachment: 2

SSO/ATH

**District of Columbia
Air Quality Synthetic Minor Permit**

**Smithsonian Institution
National Museum of the American Indian
4th & Independence Avenue SW
Washington, DC 20560**

**Synthetic Minor Permit
Draft Chapter 2 Permit No. 7289-SM**

ICIS-Air Facility ID: DC0000001100109002

**Department of Energy and Environment
Air Quality Division**

Effective Date: [TBD], 2022 Expiration Date: [TBD], 2027

GOVERNMENT OF THE DISTRICT OF COLUMBIA
Department of Energy and Environment

Chapter 2 Permit No. 7289-SM

ICIS-Air Facility ID: DC0000001100109002

Effective Date: [TBD], 2022

Expiration Date: [TBD], 2027

Pursuant to the requirements of Chapter 2, General and Non-Attainment Permits, of Title 20 of the District of Columbia Municipal Regulation (20 DCMR), the District of Columbia Department of Energy and Environment, Air Quality Division hereafter referred to as "the District" or "the Department", hereby grants approval to operate the emission units listed in Sections III and IV of this permit subject to the terms and conditions of this permit. All terms and conditions of this permit are enforceable by the District and by the U.S. Environmental Protection Agency (EPA) unless specifically designated as enforceable by the District only, as annotated by "*".

SUBJECT TO THE TERMS AND CONDITIONS OF THIS PERMIT, approval to operate is granted to:

Permittee

Smithsonian Institution
1000 Jefferson Drive SW
Washington DC 20560-0009

Facility Location

National Museum of the American Indian
4th & Independence Avenue SW
Washington DC 20560

Application Signatory per 20 DCMR 200.13:

Mr. John Michael Bixler
Deputy Director of Facilities Management

PREPARED BY:

Abraham T. Hagos
Environmental Engineer
Air Quality Division
(202) 535-1354

Date

AUTHORIZED BY:

Stephen S. Ours, P.E.
Chief, Permitting Branch
Air Quality Division
(202) 535-1747

Date

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I. General Permit Requirements

a. Compliance

1. The Permittee shall operate all equipment covered by this permit in accordance with all applicable requirements found in Title 20 of the District of Columbia Municipal Regulations (20 DCMR).
2. The Permittee shall comply with all the terms and conditions of this permit. Any non-compliance with this permit constitutes a violation of the federal Clean Air Act and/or District regulations and is grounds for enforcement action, permit revocation, permit modification or denial of permit renewal. [20 DCMR 200.15 and 20 DCMR 202.2]
3. Operation of equipment under the authority of this permit shall be considered acceptance of its terms and conditions.
4. To demonstrate compliance, the Permittee must submit an Annual Compliance Report to the Department not later than March 1 each year certifying compliance with all permit conditions. See Section I(c)(1) of this permit. [20 DCMR 500.1]
5. Nothing in this permit shall be interpreted to preclude the use of any credible evidence to demonstrate compliance or non-compliance with any term or condition of this permit. [40 CFR 51.212, 52.12, 52.30, 60.11, and 61.12]
6. In addition to any specific testing requirements specified elsewhere in this permit, the Department reserves the right to require that the Permittee perform additional emission tests using methods approved in advance by the Department. The Department will not require the Permittee to conduct tests with unreasonable frequency. [20 DCMR 502.1]

b. Permit Availability

A copy of this permit shall be available at the permitted facility at all times. A copy of this permit shall be provided to the Department upon request. [20 DCMR 104.2(b)]

c. Reporting Requirements

1. Annual Report and Compliance Certification: The Permittee shall submit an annual compliance report to the Department by March 1 of each year covering January 1 through December 31 of the previous calendar year. These reports shall contain the following information [20 DCMR 500.1]:
 - A. Fuel Usage: The total amount of each type and grade of fuel burned during the reporting period shall be reported for each emission unit and for each group of

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emission units identified as a miscellaneous activity in this permit. Natural gas use shall be reported in cubic feet; fuel oil use shall be reported in gallons. The Permittee shall submit this information in a form approved by the Department. [20 DCMR 500.1]

B. Quality of Fuel Information:

- i. For commercial fuel oil, as defined at 20 DCMR 899, the Permittee shall submit copies of all records obtained pursuant to Condition II(f)(9) of this permit during the reporting period.
- ii. For all other fuel oils and diesel, unless more specific testing is specified elsewhere in this permit for a given emission unit, the Permittee shall sample and test the fuel oil burned in its fuel burning equipment and stationary internal combustion engines/generators, using the ASTM methods specified in Condition II(f)(8), at least once each calendar quarter that fuel is fired in the units or at the time of each fuel delivery, whichever is less frequent, and shall report these data with the Annual Certification Report. For each sample, the Permittee must provide [20 DCMR 502]:

 1. The fuel oil grade and the ASTM method used to determine the grade;
 2. The weight percent sulfur of the fuel oil;
 3. The date and time the sample was taken;
 4. The name, address, and telephone number of the laboratory that analyzed the sample; and
 5. The type of test or test method performed.

In lieu of sampling and testing fuel oil each quarter for each of these data, the Permittee may comply with the requirements of Condition II(f)(9) of this permit for these fuels as well. If this option is chosen, the Permittee shall submit copies of all records obtained pursuant to these requirements during the reporting period.

If any of these data cannot be obtained from the fuel supplier, it is the responsibility of the Permittee to sample the fuel and have it analyzed to obtain the required data.

- C. Visible Emissions Test Data:** All EPA Reference Method 9 (40 CFR 60, Appendix A) visible emissions (opacity) observation results as well as the results of any non-Method 9 monitoring identifying visible emissions, per the unit-

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specific requirements of this permit. The Method 9 test data shall include the following:

- i. The date and time of each test;
- ii. The name, address, and telephone number of the tester;
- iii. Proof of the certification of the tester pursuant to Reference Method 9;
- iv. Identification of the emission unit(s) being observed during the test;
- v. The operation rate of the unit being tested, as applicable, as follows:
Note that if any of these data are estimated, a description of the estimation technique must also be included.
 1. The boiler load expressed in pounds of steam per hour (where possible) and the percent of rated capacity at which the boiler was operated during the test; or
 2. The percent of rated capacity at which the engine or other equipment was operated during the test;
- vi. The amount and type of fuel fired during the test; and
- vii. Data from a minimum of 30 minutes of visible emissions observations or as otherwise specified in the test conditions in this permit.

Unless otherwise specified in this permit, the Permittee shall fire the fuel expected to have the greatest likelihood to result in visible emissions among the fuels permitted to be used in the unit, unless that fuel has not and will not be used during the reporting period. If the only use of a given fuel in the reporting period is for purposes of periodic testing or combustion adjustment required by this permit, no visible emission test for that fuel will be required under this condition. [20 DCMR 502]

- D. Boiler and Other Fuel Burning Equipment Adjustment Data: For all boiler and other fuel burning equipment tune-ups required pursuant to the conditions of this permit, the Annual Report and Compliance Certification shall include sufficient data to substantiate that each subject boiler and other fuel burning equipment has been tuned up in accordance with 20 DCMR 805 and any other related requirements specified in this permit. [20 DCMR 500.1]
- E. The results of any other required monitoring referencing this section; and

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- F. A description of any deviation from permit requirements during the period covered by the report.
2. Annual Emission Report: By March 1 of each year, the Permittee shall submit a report of the emissions from the facility during the previous calendar year. This report shall be submitted electronically through the Combined Emissions Reporting System (CAERS), unless otherwise specified by the Department. Reports due under this condition need only cover the portion of the reporting period during which this permit is in effect where the permit is not in effect for the full reporting period. The emissions shall be reported on a per emission unit basis (though miscellaneous/insignificant sources and area sources may be grouped in a reasonable manner). If multiple fuels are used in fuel-burning equipment, the emissions shall also be reported on a per fuel basis for each emission unit. In addition, a summary table shall be provided showing total emissions from all units at the site. This emissions supplement shall include [20 DCMR 500.1]:
- A. Emissions of the following pollutants on a per fuel, per emission unit, and sum total basis as described above:
- i. Oxides of nitrogen (NO_x);
 - ii. Sulfur dioxide (SO₂);
 - iii. Carbon monoxide (CO);
 - iv. Volatile organic compounds (VOCs);
 - v. Lead (Pb) and lead compounds, as defined in 40 CFR 50.12;
 - vi. Ammonia (NH₃);
 - vii. Particulate matter in each of the following categories:
 1. Total filterable particulate matter (also known as total suspended particulate matter or TSP); *Note that if CAERS does not allow for reporting of this pollutant at the time that submittal is due, this particulate matter fraction may be excluded.*
 2. Filterable particulate matter less than 10 microns in aerodynamic diameter (PM10-FIL);
 3. Filterable particulate matter less than 2.5 microns in aerodynamic diameter (PM2.5-FIL); and

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4. 4. Condensable particulate matter (PM-CON); or
5. 5. If the breakdown of particulate matter fractions is not available as specified in Condition I(c)(2)(A)(vii)(2) through (4), as an alternative, the Permittee shall submit both total particulate matter less than 10 microns in aerodynamic diameter (PM10-PRI) and total particulate matter less than 2.5 microns in aerodynamic diameter (PM2.5-PRI); and

viii. All hazardous air pollutants (HAPs) as defined in §112(b) of the Clean Air Act, as revised.

Note that, in most cases, CAERS calculates these emissions values from emission factors that the Permittee must submit as well as other data such as fuel usage or material throughput, as applicable to specific equipment.

B. The emissions reported shall be based on the best reasonably available method for estimating emissions. In general, the following list is the hierarchy of most accurate to least accurate methods for developing emissions data and emissions factors:

- i. Continuous emission monitoring data,
- ii. Emissions data calculated based on emissions test data used with process operational/formulation data,
- iii. Emissions data calculated based on manufacturer's specifications used with process operational/formulation data, and finally,
- iv. AP-42 or other general emission factors used with process operational/formulation data.

If questions arise as to the most accurate emissions estimation method, the Permittee is encouraged to consult the Department.

C. The Permittee shall include comments with the emissions report sufficient to identify, with specificity, the source of any emissions factors used.

D. In addition to the information required pursuant to Conditions I(c)(2)(A) through (C), the Permittee shall submit any additional information the Department may request in order to collect necessary information to comply with the requirements of 40 CFR 51.

3. Notifications and Supplemental Reports: The Permittee shall submit the following notifications and supplemental reports. Notifications or reports of a deviation from a

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permit condition submitted pursuant to paragraphs A, B, or C below shall contain the following information: the date of the deviation, the time of the deviation, the emission unit involved, the duration and cause of the deviation, and what actions the Permittee took to correct or prevent the deviation. [20 DCMR 500.1]

- A. Threat to Public Health, Safety, and the Environment: The Permittee shall immediately report any permit deviation that poses an imminent and substantial danger to public health, safety, or the environment. [20 DCMR 500.1] This shall be reported to the Department's Emergency Operations number at (202) 645-5665.
- B. Synthetic Minor Emission Limit Exceedance: The Permittee shall, within two working days of discovery, submit to the Air Quality Division a report of any exceedance of any emission limit, or surrogate for an associated emission limit, taken pursuant to 20 DCMR 200.6 or 200.7 to avoid applicability of otherwise applicable regulations. Any such report shall be submitted to air.quality@dc.gov.

Exceedance of the following condition is subject to reporting under this requirement:

- i. Condition III(b)(2)(D).
- C. Periodic Maintenance of Pollution Control Equipment: Whenever it is necessary to shut down air pollution control equipment for periodic maintenance, the Permittee shall report the planned shutdown to the Department at least forty-eight hours prior to shutdown. The prior notice shall include, but not be limited to, the following [20 DCMR 102.2]:
- i. Identification of the specific facility to be taken out of service as well as its location and permit number;
 - ii. The expected length of time that the air pollution control equipment will be out of service;
 - iii. The nature and quantity of emissions of air pollutants likely to occur during the shutdown period;
 - iv. Measures that will be taken to minimize the length of shutdown period; and
 - v. The reasons that it would be impossible or impractical to shutdown the source operation during the maintenance period.
4. Nothing in this permit shall relieve the Permittee from any reporting requirements under federal or District of Columbia regulations.

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5. The Permittee may request confidential treatment of information submitted in any report required by this permit pursuant to the limitations and procedures in 20 DCMR 101.
6. Annual Reports and Compliance Certifications, notifications, supplemental reports, and other documentation required by this permit shall be sent in electronic form to air.quality@dc.gov, unless otherwise specified [20 DCMR 500.1]:

d. Certification Requirements

Except where expressly specified elsewhere in this permit, any document, including all application forms, reports, and compliance certifications submitted to the Department pursuant to this permit shall contain a signed certification by a person authorized by the Permittee to certify such documents and to legally bind the Permittee, and in a position to be aware of the truthfulness and accuracy of the certified document, with the following language [20 DCMR 104.2(b)]:

“I hereby certify, under penalty of D.C. Official Code § 8-101.05e, that I am authorized to submit this document on behalf of the Permittee and that the statements contained herein are true, complete, and current, to best of my knowledge.”

e. Construction, Installation, or Alteration

The Permittee shall not initiate construction, installation, or modification of any equipment or facility which emits or controls air pollutants prior to obtaining a construction permit from the Department in accordance with 20 DCMR 200.

f. Permit Renewal, Expiration, Reopening, Revision, and Revocation

1. This permit expires on **[five (5) years after its effective date]** [20 DCMR 200.4], but may be renewed before it expires pursuant to 20 DCMR 200.5.
 - A. If the Permittee wishes to continue construction or operation of the equipment covered by this permit after the expiration date of this permit, the Permittee shall file a complete application for renewal of this permit at least six (6) months before the date of permit expiration.
 - B. The Permittee's right to operate ceases on the expiration date unless the Department extends the permit at the request of the Permittee in accordance with 20 DCMR 200.3.

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2. The Department may amend, suspend, revoke or deny renewal of this permit for the reasons specified in 20 DCMR 202, in accordance with the procedures also specified therein.
3. The Permittee may at any time apply for termination of all or a portion of this permit relating solely to operations, activities, and emissions that have been permanently discontinued at the permitted stationary source. An application for termination shall identify with specificity the permit or permit terms that relate to the discontinued operations, activities, and emissions. In terminating all or portions of this permit pursuant to this condition, the Department may make appropriate orders for the submission of a final report or other information from the Permittee to verify the complete discontinuation of the relevant operations, activities, and emissions. [20 DCMR 202.4 and 20 DCMR 500.1]

g. Permit and Application Consultation

The Permittee is encouraged to consult with Department personnel at any time concerning the construction, operation, modification or expansion of any facility or equipment; the operation of required pollution control devices or systems; the efficiency of air pollution control devices or systems; applicable requirements; or any other air pollution problem associated with the installation.

h. Entry and Inspection

1. Upon the presentation of appropriate credentials to the owner, agent in charge, or tenant, the Department shall have the right, subject to 20 DCMR 104.3, to enter a premise or inspect an activity reasonably believed to be subject to the air quality regulations, including those activities covered by this permit, to determine compliance with the requirements of the air quality regulations. The right of entry shall be for the following purposes [20 DCMR 104.1]:
 - A. Inspection, including the right to inspect and copy records related to compliance with the air quality regulations;
 - B. Observation;
 - C. Measurement;
 - D. Sampling;
 - E. Testing; and
 - F. Evidence Collection

B. The Department may [20 DCMR 104.2]:

- A. Investigate and take testimony under oath regarding any report of noncompliance with a federal or District law or regulation applicable to air pollution control; and
- B. In addition to the requirements of Chapter 5 of Title 20 DCMR, require a person or entity subject to the air quality regulations, or who the Department reasonably believes may have information necessary to carry out the purposes of the air quality regulations, on a one-time, periodic, or continuous basis to:
 - i. Establish, maintain, and submit records and reports;
 - ii. Install, use, and maintain monitoring equipment, and use audit procedures or methods;
 - iii. Take samples in accordance with such procedures or methods, at such locations, at such intervals, during such periods, and in such manner as the Department shall prescribe;
 - iv. Keep records on control equipment parameters, production variables, or other indirect data as appropriate;
 - v. Submit compliance certifications; and
 - vi. Provide other information as the Department may require.

II. Facility-Wide Permit Requirements

The Permittee shall comply with the following facility-wide permit requirements wherever applicable to the facility:

a. General Maintenance and Operations

At all times, including periods of start-up and malfunction, the Permittee shall, to the extent practicable, maintain and operate stationary sources and fuel-burning equipment, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions. [20 DCMR 606.4]

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b. Visible Emissions

1. Visible emissions shall not be emitted into the outdoor atmosphere from stationary sources (excluding fuel-burning equipment placed in initial operation before January 1, 1977); provided, that discharges not exceeding forty percent (40%) opacity (unaveraged) shall be permitted for two (2) minutes in any sixty (60) minute period and for an aggregate of twelve (12) minutes in any twenty-four hour (24 hr.) period during start-up, cleaning, soot blowing, adjustment of combustion controls, or malfunction of equipment. [20 DCMR 606.1]
2. Visible emissions whose opacity is in excess of ten percent (10%) (unaveraged), at any time shall not be permitted into the outdoor atmosphere, from any fuel-burning equipment placed in initial operation before January 1, 1977; provided that [20 DCMR 606.2]:
 - A. Opacity not in excess of forty percent (40%) (unaveraged) shall be permitted for two (2) minutes in any sixty (60) minute period and for an aggregate of twelve (12) minutes in any twenty-four hour (24 hr.) period other than during start-up of equipment;
 - B. During start-up of equipment, opacity not in excess of forty percent (40%) [averaged over six (6) minutes] shall be permitted for an aggregate of five (5) times per start-up; and
 - C. In addition to the emissions permitted under Condition II(b)(2)(A), during shutdown of equipment, opacity not in excess of fifteen percent (15%) (unaveraged) shall be allowed and in addition, opacity not in excess of thirty percent (30%) [averaged over three (3) minutes] shall be permitted for an aggregate of three (3) times per shutdown.

Note that 20 DCMR 606 is subject to an EPA-issued call for a State Implementation Plan (SIP) revision (known as a "SIP call") requiring the District to revise 20 DCMR 606. See "State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA's SSM Policy Applicable to SIPs; Findings of Substantial Inadequacy; and SIP Calls To Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction", 80 Fed. Reg. 33840 (June 12, 2015). It is likely that this federal action will result in changes to the requirements of 20 DCMR 606. Any such changes, once finalized in the DCMR, will supersede the language of Condition II(b) as stated above.

c. Control of Fugitive Dust

The Permittee shall ensure that fugitive dust from the facility is controlled in accordance with 20 DCMR 605 as follows:

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1. Reasonable precautions shall be taken to minimize the emission of any fugitive dust into the outdoor atmosphere. The reasonable precautions shall include, but not be limited to, the following:
 - A. In the case of unpaved roads, unpaved roadways, and unpaved parking lots;
 - i. Use of binders, chemicals, or water in sufficient quantities and at sufficient frequencies to prevent the visible emission of dust due to the movement of vehicles or of the wind; and
 - ii. Prompt clean-up of any dirt, earth, or other material from the vicinity of the road, roadway, or lot which has been transported from the road, roadway, or lot due to anthropogenic activity or due to natural forces.
 - B. In the case of paved roads, paved roadways, and paved parking lots: Maintenance of the road, roadway, lot, or paved shoulder in a reasonably clean condition through reasonably frequent use of water, sweepers, brooms, or other means, through reasonably frequent removal of accumulated dirt from curb-side gutters, through reasonably prompt repair of pavement, or through any other means;
 - C. In the case of vehicles transporting dusty material or material which is likely to become dusty:
 - i. Fully covering the material in question, with a tarpaulin or other material; and
 - ii. Operation, maintenance, and loading of the vehicle, distribution of the loaded material on or in the vehicle, and limiting the quantity of material loaded on or in the vehicle, so that there will be no spillage of the material onto the roads;
 - D. In the case of vehicles which accumulate dirt on the wheels, undercarriages, and other parts of the vehicle, due to the movement of the vehicle on dusty, dirty or muddy surfaces: Water washing of all of the dirty parts of the vehicle to thoroughly remove the dirt before or immediately after the vehicle leaves the dusty, dirty, or muddy surface;
 - E. In the case of the demolition of buildings or structures: Use, to the extent possible, of water;
 - F. In the case of removal of demolition debris which is dusty or likely to become dusty: Use of water to thoroughly wet the material before moving or removing the material and keeping it wet or otherwise in a dust-free condition until eventual disposal;

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- G. In the case of loading and unloading of dusty material and in the case where dry sand-blasting or dry abrasive cleaning is necessary: Use of enclosed areas or hoods, vents, and fabric filters. If it is shown to the satisfaction of the Department that use of enclosed areas, hoods, vents, and fabric filters is not possible, alternate control techniques acceptable to the Department and designed to minimize the emissions to the extent possible shall be utilized; and
 - H. In the case of stockpiles of dusty material: Use, where possible, of closed silos, closed bins or other enclosures which are adequately vented to fabric filters. Where the use of closed silos, closed bins, or other enclosures is not possible, thorough wetting of the material before loading onto the stockpile and keeping the stockpile wetted, covered, or otherwise in a non-dusty condition.
- 2. The emission of fugitive dust from the following is prohibited:
 - A. Any material handling, screening, crushing, grinding, conveying, mixing, or other industrial-type operation or process;
 - B. Heater-planers in repairing asphaltic concrete pavements;
 - C. Portable tar-melters, unless close-fitting lids, in good repair, for the tar-pots are available and are used;
 - D. The ventilation of any tunneling operation; or
 - E. The cleaning of exposed surfaces through the use of compressed gases.
 - 3. All persons shall comply with the provisions of this Condition and those of the Soil Erosion and Sedimentation Control Act of 1977 (D.C. Law 2-23).
 - 4. In those circumstances where it is not possible to comply with specific provisions of both this Condition and the Soil Erosion and Sedimentation Control Act of 1977 (D.C. Law 2-23), the provisions of the Soil Erosion and Sedimentation Control Act of 1977 (D.C. Law 2-23), shall prevail.

d. Open Fires

Open fires shall be prohibited at the Permittee's facility, except as otherwise provided for in 20 DCMR 604.2. [20 DCMR 604]

e. Asbestos

The Permittee shall adhere to the requirements of 20 DCMR 800* and 40 CFR 61, Subpart M, pertaining to handling of asbestos-containing materials.

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f. Fuel Oil Sulfur Content

Except where a more stringent requirement exists elsewhere in this permit, the Permittee shall comply with the following requirements governing the sulfur content of fuel oils:
[20 DCMR 801]

1. The purchase, sale, offer for sale, storage, transport, or use of fuel oil that contains more than one percent (1%) sulfur by weight in the District is prohibited, if the fuel oil is to be burned in the District.
2. On and after July 1, 2016, commercial fuel oil that is purchased, sold, offered, stored, transported, or used in the District shall meet the following requirements, unless otherwise specified in Condition II(f)(5):
 - A. Number two (No. 2) commercial fuel oil shall not contain sulfur in excess of five hundred parts per million (500 ppm) by weight, or five one-hundredths percent (0.05%) by weight;
 - B. Number four (No. 4) commercial fuel oil shall not contain sulfur in excess of two thousand five hundred parts per million (2,500 ppm) by weight, or twenty-five one-hundredths percent (0.25%) by weight; and
 - C. Number five (No. 5) and heavier fuel oils are prohibited.
3. On and after July 1, 2018, the purchase, sale, offer for sale, storage, transport, or use of number two (No. 2) commercial fuel oil is prohibited if it contains more than fifteen parts per million (15 ppm) or fifteen ten-thousandths percent (0.0015%) by weight of sulfur, unless otherwise specified in Condition II(f)(5).
4. Fuel oil that was stored in the District by the ultimate consumer prior to the applicable compliance date in Condition II(f)(2) or (3), which met the applicable maximum sulfur content at the time it was stored, may be used in the District after the applicable compliance date.
5. When EPA temporarily suspends or increases the applicable limit or percentage by weight of sulfur content of fuel required or regulated by EPA by granting a waiver in accordance with Clean Air Act § 211(c)(4)(C) provisions, the federal waiver shall apply to corresponding limits for fuel oil in the District as set forth in Condition II(f)(2) or (3).
6. If a temporary increase in the applicable limit of sulfur content is granted under Condition II(f)(5):

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- A. The suspension or increase in the applicable limit will be granted for the duration determined by EPA; and
 - B. The sulfur content for number two (No. 2) and lighter fuel oils may not exceed five hundred parts per million (500 ppm) by weight.
7. Unless precluded by the Clean Air Act or the regulations thereunder, Conditions II(f)(2) and (3) shall not apply to:
- A. A person who uses equipment or a process to reduce the sulfur emissions from the burning of a fuel oil, provided that the emissions may not exceed those that would result from the use of commercial fuel oil that meets the applicable limit or percentage by weight specified in Condition II(f)(2) or (3);
 - B. The Permittee of a stationary source where equipment or a process is used to reduce the sulfur emissions from the burning of a fuel oil, provided that the emissions may not exceed those that would result from the use of commercial fuel oil that meets the applicable limit or percentage by weight specified in Condition II(f)(2) or (3); and
 - C. Commercial fuel oil that is transported through the District but is not intended for purchase, sale, offering, storage, or use in the District.
8. For the purpose of determining compliance with the requirements of this section, the sulfur content of fuel oil shall be determined in accordance with the sample collection, test methods, and procedures specified under 20 DCMR 502.6 (relating to sulfur in fuel oil) as follows:
- A. Testing of fuel oil shall be undertaken in accordance with the most current version of the following methods, as appropriate for the application:
 - i. To obtain fuel samples:
 1. ASTM D 270, “Standard Method of Sampling Petroleum and Petroleum Products”;
 2. ASTM D 4057, “Practice for Manual Sampling of Petroleum and Petroleum Products”; or
 3. ASTM D 4177, “Standard Practice for Automatic Sampling of Petroleum and Petroleum Products”;
 - ii. To determine the fuel oil grade:

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- v. The fuel oil grade; and
 - vi. The sulfur content of the fuel oil as determined using the sampling and testing methods specified in Condition II(f)(8), which may be expressed as the maximum allowable sulfur content.
- B. All applicable records required under Condition II(f)(9)(A) shall be maintained in electronic or paper format for not less than three (3) years [20 DCMR 801.9(b)];
- C. An electronic or paper copy of the applicable records required under Condition II(f)(9)(A) shall be provided to the Department upon request;
- D. The ultimate consumer shall maintain the applicable records required under Condition II(f)(9)(A) in electronic or paper format for not less than three (3) years, unless the transfer or use of the fuel oil occurs at a private residence [20 DCMR 801.9(d)];
- E. A product transfer document that meets federal requirements, such as a Bill of Lading, may be used for the data in Condition II(f)(9)(A)(i) through (vi) and shall be considered a certification that the information is accurate; and
- F. The Department may opt to require supplemental sampling and testing of the fuel oil to confirm the certifications.
- g. Onroad Engine Idling and Nonroad Diesel Engine Idling*
- 1. The Permittee shall ensure that the provisions of 20 DCMR 900.1 pertaining to onroad engine idling are met at the facility. Specifically, the Permittee shall ensure that no engine of a gasoline or diesel powered motor vehicle, the engine of a public vehicle for hire, including buses with a seating capacity of twelve (12) or more persons, shall idle for more than three (3) minutes while the motor vehicle is parked, stopped, or standing, on the premises or on roadways adjacent to the premises for the purpose of serving the premises, including for the purpose of operating air conditioning equipment in those vehicles, except as follows:
 - A. To operate private passenger vehicles;
 - B. To operate power takeoff equipment including: dumping, cement mixers, refrigeration systems, content delivery, winches, or shredders;
 - C. To idle the engine for five (5) minutes to operate heating equipment when the ambient air temperature is thirty two degrees Fahrenheit (32 °F) or below; or

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- D. To operate warming buses during a Cold Emergency Alert in accordance with 20 DCMR 900.1(d).
2. No person owning, operating, leasing, or having control over a nonroad diesel engine, or the holder of the permit for the activity for which the nonroad diesel engine is being operated, shall cause or allow the idling of a nonroad diesel engine under its control or on its property for more than three (3) consecutive minutes. [20 DCMR 900.2]
3. Condition II(g)(2) does not apply to locomotives, generator sets, marine vessels, recreational vehicles, farming equipment, military equipment when it is being used during training exercises, emergency or public safety situations, or any private use of a nonroad diesel engine that is not for compensation. [20 DCMR 900.3]
4. The idling limit in Condition II(g)(2) does not apply to [20 DCMR 900.4]:
 - A. Idling necessary to ensure the safe operation of the equipment and safety of the operator, such as conditions specified by the equipment manufacturer in the manual or an appropriate technical document accompanying the nonroad diesel engine;
 - B. Idling for testing, servicing, repairing, diagnostic purposes, or to verify that the equipment is in good working order, including regeneration of a diesel particulate filter, in accordance with the equipment manufacturer manual or other technical document accompanying the nonroad diesel engine;
 - C. Idling for less than fifteen (15) minutes when queuing (*i.e.*, when nonroad diesel equipment, situated in a queue of other vehicles, must intermittently move forward to perform work or a service), not including the time an operator may wait motionless in line in anticipation of the start of a workday or opening of a location where work or a service will be performed.
 - D. Idling by any nonroad diesel engine being used in an emergency or public safety capacity;
 - E. Idling for a state or federal inspection to verify that all equipment is in good working order, if idling is required as part of the inspection; and
 - F. Idling for up to five (5) consecutive minutes to operate heating equipment when the ambient air temperature is thirty-two degrees Fahrenheit (32°F) or below.

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h. Fleet Maintenance

The Permittee shall ensure that the engines, power, and exhaust mechanisms of each vehicle of its motor fleet is equipped, adjusted, maintained, and operated so as to prevent the escape of a trail of visible fumes or smoke for more than ten (10) consecutive seconds. [20 DCMR 901]*

i. Lead in Gasoline

The Permittee shall ensure that all gasoline sold at the facility, if any, contains no more than one gram of lead per gallon. [20 DCMR 902]*

j. Odors and Nuisance Air Pollutants

The Permittee shall ensure that the facility does not emit into the atmosphere any odorous or other air pollutant, from any source, in any quantity, and of any characteristic and duration which is, or is likely to be, injurious to the public health or welfare, or which interferes with the reasonable enjoyment of life and property. [20 DCMR 903]*

k. Risk Management

1. The Permittee shall ensure that the requirements of 40 CFR part 68, as in effect on September 30, 1997, are complied with at the site for the purposes of preventing, detecting, and responding to accidental chemical releases to the air, pursuant to the requirements of Section 112(r) of the Federal Clean Air Act with the terms used and defined in those provisions. [20 DCMR 402]*
2. Should this stationary source, as defined in 40 CFR part 68.3, become subject to part 68, then the Permittee shall submit a risk management plan (RMP) by the date specified in Part 68.10 and shall certify compliance with the requirements of part 68 as part of the annual compliance certification required by 40 CFR part 70 or 71. [20 DCMR 302.1(d)]

l. Architectural and Industrial Maintenance Coatings

1. Paints and refinishing coatings that contain VOCs in excess of the limits specified in the table below, including any VOC containing materials added to the original coating supplied by the manufacturer, shall be prohibited. [20 DCMR 773.1, 774.1, and 774.10]

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VOC Content Limits for Architectural Coatings.¹

Coating Category	VOC Content Limit (Grams VOC per liter) ²
Flat Coatings	100
Non-flat Coatings	150
Non-flat- High Gloss Coatings	250
<i>Specialty Coatings</i>	
Antenna Coatings	530
Antifouling Coatings	400
Bituminous Roof Coatings	300
Bituminous Roof Primers	350
Bond Breakers	350
Calcimine Recoater	475
Clear Wood Coatings	
●Clear Brushing Lacquers	680
●Lacquers (including lacquer sanding sealers)	550
●Sanding Sealers (other than lacquer sanding sealers)	350
●Varnishes	350
Concrete Curing Compounds	350
Concrete Surface Retarders	780
Conjugated Oil Varnish	450
Conversion Varnish	725
Dry Fog Coatings	400
Faux Finishing Coatings	350
Fire-Resistive Coatings	350
Fire-Retardant Coatings	
●Clear	650
●Opaque	350
Floor Coatings	250
Flow Coatings	420
Form-Release Compounds	250
Graphic Arts Coatings (Sign Paints)	500
High-Temperature Coatings	420
Industrial Maintenance Coatings	340
Impacted Immersion Coatings	780
Low-Solids Coatings ³	120
Magnesite Cement Coatings	450
Mastic Texture Coatings	300
Metallic Pigmented Coatings	500
Multi-Color Coatings	250
Nuclear Coatings	450

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Coating Category	VOC Content Limit (Grams VOC per liter)²
Pre-Treatment Wash Primers	420
Primers, Sealers, and Undercoaters	200
Reactive Penetrating Carbonate Stone Sealer	600
Quick-Dry Enamels	250
Quick-Dry Primers, Sealers and Undercoaters	200
Recycled Coatings	250
Roof Coatings	250
Rust Preventative Coatings	400
Shellacs	
●Clear	730
●Opaque	550
Specialty Primers, Sealers, and Undercoaters	350
Stains	250
Stone Consolidants	450
Swimming Pool Coatings	340
Swimming Pool Repair and Maintenance Coatings	340
Temperature-Indicator Safety Coatings	550
Thermoplastic Rubber Coatings and Mastics	550
Traffic Marking Coatings	150
Waterproofing Sealers	250
Waterproofing Concrete/Masonry Sealers	400
Wood Preservatives	350

¹Limits are expressed in grams of VOC per liter of coating thinned to the manufacturer's maximum recommendation, excluding the volume of any water, exempt compounds, or colorant added to tint bases. Manufacturer's maximum recommendation means the maximum recommendation for thinning that is indicated on the label or lid of the coating container.

²Conversion factor: one pound VOC per gallon (U.S.) = 119.95 grams per liter.

³Units for this coating are grams of VOC per liter (pounds of VOC/gallon) of coating, including water and exempt compounds.

2. The Permittee shall not apply a coating that is thinned to exceed the applicable VOC limit specified in the above table. [20 DCMR 774.5]
3. The Permittee shall not apply any rust preventive coating for industrial use, unless such a rust preventive coating complies with the industrial maintenance coating VOC limit specified in the above table. [20 DCMR 774.6]
4. For any coating that does not meet any of the definitions for the specialty coatings categories listed in the table above, the VOC content limit shall be determined by classifying the coating as a flat coating or a non-flat coating, based on its gloss, as defined in 20 DCMR 799, and the corresponding flat or non-flat coating limit shall apply. [20 DCMR 774.7]
5. Notwithstanding the provisions of Condition II(1)(1) of this permit, a person or

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facility may add up to ten percent (10%) by volume of VOC to a lacquer to avoid blushing of the finish during days with relative humidity greater than seventy percent (70%) and temperature below sixty-five degrees Fahrenheit (65° F) or eighteen degrees Celsius (18° C) at the time of application, provided that the coating contains acetone and no more than five hundred fifty grams (550 g.) of VOC per liter of coating, less water and exempt compounds, before the addition of VOC. [20 DCMR 774.10]

m. Adhesives and Sealants

1. Any person who supplies, sells, offers for sale, or uses or applies adhesives, sealants, or adhesive or sealant primers shall comply with the following, except as provided in Condition II(m)(2). Unless specified in Condition III, this permit does not authorize the Permittee to manufacture any adhesive, sealant, adhesive primer, or sealant primer.: [20 DCMR 201 and 20 DCMR 743.1]

A. No person shall sell, supply, offer for sale, use or apply any adhesive, sealant, adhesive primer, or sealant primer manufactured on and after January 1, 2012, within the District of Columbia in excess of the applicable VOC content limits specified in the following Table of Standards, except as provided in Conditions II(m)(1)(D) and II(m)(2) [20 DCMR 744.1 and 744.2]:

Table of Standards. VOC Content Limits for Adhesives, Sealants, Adhesive Primers, Sealant Primers and Adhesives Applied to Particular Substrates.

Adhesive, sealant, adhesive primer or sealant primer category	VOC content limit (grams VOC per liter[#])
CATEGORY 1: ADHESIVES	VOC Limits (g/L)
ABS welding	400
Ceramic tile installation	130
Computer diskette jacket manufacturing	850
Contact or contact bond	250
Cove base installation	150
CPVC welding	490
Indoor floor covering installation	150
Metal to urethane/rubber molding or casting	850
Motor vehicle	250
Motor vehicle weatherstrip	750
Multi-purpose construction	200
Non-membrane roof installation/repair	300

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Adhesive, sealant, adhesive primer or sealant primer category	VOC content limit (grams VOC per liter[#])
Outdoor floor covering installation	250
Plastic cement welding (except ABS, PVC or CPVC)	510
PVC welding	510
Single-ply roof membrane installation/repair	250
Structural glazing	100
Thin metal laminating	780
Tire retread	100
Perimeter bonded sheet vinyl flooring installation	660
Waterproof resorcinol glue	170
Sheet-applied rubber installation	850
CATEGORY 2: SEALANTS	VOC Limits in (g/L)
Architectural	250
Marine deck	760
Non-membrane roof installation / repair	300
Roadway	250
Single-ply roof membrane	450
Other	420
CATEGORY 3: ADHESIVE PRIMERS	VOC Limits in (g/L)
Automotive glass	700
Motor vehicle glass bonding	900
Plastic cement welding	650
Single-ply roof membrane	250
Traffic marking tape	150
Other	250
CATEGORY 4: SEALANT PRIMERS	VOC Limits in (g/L)
Architectural – non-porous material	250
Architectural – porous material	775
Marine deck	760
Other	750
CATEGORY 5: ADHESIVES APPLIED TO PARTICULAR SUBSTRATES	VOC Limits in (g/L)
Flexible vinyl	250
Fiberglass	200
Reinforced plastic composite	200
Metal	30
Porous material (other than wood)	120

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Adhesive, sealant, adhesive primer or sealant primer category	VOC content limit (grams VOC per liter[#])
Rubber	250
Wood	30
Other substrates	250

[#] The VOC content is determined as the weight of VOCs, less water and exempt compounds as specified in 20 DCMR 747.

- B. The VOC content limits in the Table of Standards in Condition II(m)(1)(A) for adhesives applied to particular substrates (such as, Category 5), shall apply as follows [20 DCMR 744.3]:
- i. If an operator uses an adhesive or sealant subject to a specific VOC content limit for such adhesive or sealant in the Table of Standards in Condition II(m)(1)(A), such specific limit applies rather than an adhesive-to-substrate limit; and
 - ii. If an adhesive is used to bond dissimilar substrates together, the applicable substrate category with the highest VOC content shall be the limit for such use.
- C. Except as provided in Conditions II(m)(1)(D) and II(m)(2), any person subject to Condition II(m) using a surface preparation or cleanup solvent shall [20 DCMR 744.4]:
- i. Except as provided in Condition II(m)(1)(C)(ii) for single-ply roofing, not use materials containing VOCs for surface preparation, unless the VOC content of the surface preparation solvent is less than seventy grams per liter (70 g./L);
 - ii. If a surface preparation solvent is used in applying single-ply roofing, not use materials for surface preparation containing VOCs, unless the composite vapor pressure of the surface preparation solvent, excluding water and exempt compounds, does not exceed forty-five millimeters of mercury (45 mm. Hg) at twenty degrees Celsius (20° C) or sixty-eight degrees Fahrenheit (68° F);
 - iii. Except as provided in Condition II(m)(1)(C)(iv), not use materials containing VOCs for the removal of adhesives, sealants, or adhesive or sealant primers from surfaces, other than spray application equipment, unless the composite vapor pressure of the solvent used, excluding water and exempt compounds, is less than forty-five millimeters of mercury (45 mm. Hg) at twenty degrees Celsius (20° C) or sixty-eight degrees Fahrenheit (68° F); and

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- iv. Remove an adhesive, sealant, adhesive primer, or sealant primer from the parts of spray application equipment by:
 1. An enclosed cleaning system, or an equivalent cleaning system as determined by the SCAQMD's "General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems," dated October 3, 1989;
 2. Using a solvent with a VOC content of seventy grams (70 g) of VOC per liter of material, or less; or
 3. Soaking parts containing dried adhesive in a solvent as long as the composite vapor pressure, excluding water and exempt compounds, of the solvent is nine and one half millimeters of mercury (9.5 mm. Hg) at twenty degrees Celsius (20° C) or sixty-eight degrees Fahrenheit (68° F) or less and is kept in a closed container, which shall be closed except when depositing or removing parts of materials from the container.
- D. Any person using an adhesive, sealant, adhesive primer, or sealant primer subject to Condition II(m) who wishes to comply with Conditions II(m)(1)(A) and (C) with the use of an add-on control device in accordance with 20 DCMR 744.5 shall first obtain a permit pursuant to 20 DCMR 200, which shall specify the conditions under which this compliance method may be used. [20 DCMR 744.5 and 20 DCMR 200]
- E. Any person using adhesives, sealants, adhesive primers, sealant primers, or surface preparation or cleanup solvents subject to Condition II(m) shall [20 DCMR 744.6]:
 - i. Store or dispose of all absorbent materials, such as cloth or paper, which are moistened with adhesives, sealants, primers, or solvents subject to Condition II(m), in non-absorbent containers that shall be closed except when placing materials in or removing materials from the container;
 - ii. Store all VOC-containing adhesives, sealants, adhesive primers, sealant primers, surface preparation and cleanup solvents, and related waste materials in closed containers;
 - iii. Ensure that mixing and storage containers used for VOC-containing adhesives, sealants, adhesive primers, sealant primers, surface preparation and cleanup solvents, and related waste materials are kept closed at all times except when depositing or removing these materials;
 - iv. Minimize spills of VOC-containing adhesives, sealants, adhesive primers, sealant primers, surface preparation and cleanup solvents, and related waste

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materials;

- v. Convey VOC-containing adhesives, sealants, adhesive primers, sealant primers, surface preparation and cleanup solvents, and related waste materials from one location to another in closed containers or pipes; and
 - vi. Minimize VOC emission from cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.
- F. No person shall solicit, require the use or specify the application of any adhesive, sealant, adhesive primer, sealant primer, surface preparation or cleanup solvent if such use or application results in a violation of the provisions of 20 DCMR Chapter 7. The prohibition of this condition shall apply to all written or oral contracts under which any adhesive, sealant, adhesive primer, sealant primer, and surface preparation or cleanup solvent subject to Condition II(m) is to be used at any location in the District of Columbia. [20 DCMR 744.7]
2. Exemptions and exceptions to Condition II(m) are as follows: [20 DCMR 745]
- A. Condition II(m) shall not apply to the use of the following compounds: [20 DCMR 745.1]
- i. Adhesives, sealants, adhesive primers, or sealant primers being tested or evaluated in any research and development, quality assurance or analytical laboratory, provided records are maintained as required in Condition II(m)(5);
 - ii. Adhesives, sealants, adhesive primers, and sealant primers that are subject to VOC standards in 20 DCMR § 720 (Consumer Products – VOC Standards);
 - iii. Adhesives and sealants that contain less than twenty grams (20 g) of VOC per liter of adhesive or sealant, less water and less exempt compounds, as applied;
 - iv. Cyanoacrylate adhesives;
 - v. Adhesives, sealants, adhesive primers, or sealant primers that are sold or supplied by the manufacturer or supplier in containers with a net volume of sixteen (16) fluid ounces or less, or a net weight of one pound (1 lb) or less, except plastic cement welding adhesives and contact adhesives; or
 - vi. Contact adhesives that are sold or supplied by the manufacturer or supplier in containers with a net volume of one gallon (1 gal) or less.

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- B. The requirements of Condition II(m) shall not apply to the use of adhesives, sealants, adhesive primers, sealant primers, or surface preparation and cleanup solvents in the following operations [20 DCMR 745.2]:
- i. Tire repair operations, provided the label on the adhesive states “For Tire Repair Only”;
 - ii. In the assembly, repair, and manufacture of aerospace components or undersea-based weapon system components;
 - iii. Medical equipment manufacturing; or
 - iv. Plaque laminating operations in which adhesives are used to bond clear, polyester acetate laminate to wood with lamination equipment installed before July 1, 1992, provided that records are maintained in accordance with Condition II(m)(2)(E).
- C. The provisions of Condition II(m) (except Condition II(m)(2)(E)) shall not apply to a person who uses or applies any adhesive, sealant, adhesive primer, and sealant primer at a stationary source if the total VOC emissions from all adhesives, sealants, adhesive primers, and sealant primers used at the stationary source are less than two hundred pounds (200 lb) per calendar year, or an equivalent volume. [20 DCMR 745.3]
- D. The provisions of Conditions II(m)(1)(A) and (C) shall not apply to the use of any adhesives, sealants, adhesive primers, sealant primers, cleanup solvents, and surface preparation solvents, provided the total volume of non-complying adhesives, sealants, primers, cleanup and surface preparation solvents applied facility-wide at a stationary source does not exceed fifty-five gallons (55 gal) per calendar year. [20 DCMR 745.4]
- E. Any person claiming an exemption pursuant to Conditions II(m)(2)(B)(iv) through II(m)(2)(D) shall record and maintain monthly operational records sufficient to demonstrate compliance, and in accordance with Conditions II(m)(3) and (4). [20 DCMR 745.5]
- F. Condition II(m) shall not apply to a distributor who sells, supplies or offers for sale in the District of Columbia any adhesive, sealant, adhesive primer, or sealant primer that does not comply with Condition II(m)(1)(a) provided that such distributor makes and keeps records demonstrating:
- i. The adhesive, sealant, adhesive primer, or sealant primer is intended for shipment and use outside of the District of Columbia; and

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- ii. The distributor has taken reasonable precautions to assure that the adhesive, sealant, adhesive primer, or sealant primer is not distributed to, or within, the District of Columbia.
 - G. Condition II(m)(2)(F) shall not apply to any adhesive, sealant, adhesive primer, or sealant primer that is sold, supplied, or offered for sale by any person to a retail outlet in the District of Columbia.
3. Each person subject to Condition II(m) shall maintain records demonstrating compliance with the regulations, including, but not limited to, the following information [20 DCMR 746.1]:
 - A. A list of each adhesive, sealant, adhesive primer, sealant primer cleanup solvent, and surface preparation solvent in use and in storage;
 - B. A data sheet or material list that provides the material name, manufacturer identification, and material application;
 - C. Catalysts, reducers, or other components used and the mix ratio;
 - D. The VOC content of each product as supplied;
 - E. The final VOC content or vapor pressure, as applied; and
 - F. The monthly volume of each adhesive, sealant, adhesive primer, sealant primer, cleanup or surface preparation solvent used.
4. All records made to determine compliance with Condition II(m) shall be maintained for five (5) years from the date such record is created and shall be made available to the District of Columbia within ninety (90) days of a request. [20 DCMR 746.3]
5. For adhesives, sealants, adhesive primers, and sealant primers subject to the laboratory testing exemption pursuant to Condition II(m)(2)(A)(i), the person conducting the testing shall make and maintain records of all such materials used, including, but not limited to, the product name, the product category of the material or type of application, and the VOC content of each material. [20 DCMR 746.4]
6. Testing and calculations to determine compliance with Condition II(m) shall be performed as specified in 20 DCMR 747.
7. A person shall not apply a VOC-containing adhesive, adhesive primer, sealant, or sealant primer at a stationary source unless applied by one (1) of the following application methods using equipment operated in accordance with the specifications of the equipment manufacturer [20 DCMR 749.1]:

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- A. Electrostatic application;
- B. High volume low pressure (HVLP) spraying;
- C. Flow coating;
- D. Roller coating or hand application methods, including non-spray application methods similar to hand or mechanically powered caulking gun, brush coating, or direct hand application methods;
- E. Dip coating (including electrodeposition coating):
- F. Airless spraying;
- G. Air-assisted airless spraying; or
- H. Other adhesive application method that a person has demonstrated and the Department has determined achieves a transfer efficiency equivalent to or better than that achieved by HVLP spraying.

III. Emission Unit Specific Requirements

This operating permit identifies emission units based on information provided by the Permittee and cites specific applicable regulations from 20 DCMR, as well as the Code of Federal Regulations (CFR). These cited regulations and rules stipulate the conditions under which the Permittee is permitted to operate, the control equipment (where applicable) that must be used to minimize air pollution, and the monitoring, testing, record keeping, and reporting requirements that will enable the Permittee to demonstrate, to the District and EPA, compliance with regulatory requirements.

Operation of the emission units listed below is permitted subject to the facility complying with the following emission limits, standards, and other requirements specified herein and elsewhere in this permit [20 DCMR 200.15].

Emission Units¹			
Emission Unit ID	Stack ID	Emission Unit Name	Description
G-1	Stack S2	Emergency Generator	1,250 kWe Cummins, Model No. DFLC-5564915, Serial No. H020403284 emergency generator set powered by a 1,863 hp Cummins Model KTA-50-G3 diesel-fired engine, installed in 2004 (not subject to NSPS Subpart III)

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Emission Units¹			
Emission Unit ID	Stack ID	Emission Unit Name	Description
B-1	Stack S1	Boiler-1	8.165 MMBTU/hr dual fuel fired Cleaver-Brooks, model No. CBI-200-200-125, serial No. OL 101887 boiler.
B-2	Stack S1	Boiler-2	8.165 MMBTU/hr dual fuel oil fired Cleaver-Brooks, model No. CBI-200-200-125, serial No. OL 101888 boiler.
B-3	Stack S1	Boiler-3	8.165 MMBTU/hr dual fuel oil fired Cleaver-Brooks, model No. CBI-200-200-125, serial No. OL 101889 boiler.
SPB-1	Stack SPB1	Spray Paint Booth	HVLP Spray Gun, Cross-draft, Model IESDDRF 141020PSB, 98% dry filter efficiency

¹Miscellaneous/Insignificant activities are listed separately in Condition IV of this permit.

- a. Emission Unit G1: Non-NSPS Emergency Generator:** One (1) 1,250 kW Cummins, Model No. DFLC-5564915, Serial No. H020403284 emergency generator set powered by a 1,863 hp Cummins Model KTA-50-G3 diesel-fired engine, installed in 2004 (not subject to NSPS Subpart III):

1. Emission Limitations:

- A. Visible emissions shall not be emitted into the outdoor atmosphere from this generator set, except that discharges not exceeding forty percent (40%) opacity (unaveraged) shall be permitted for two (2) minutes in any sixty (60) minute period and for an aggregate of twelve (12) minutes in any twenty-four hour (24 hr.) period during start-up, cleaning, adjustment of combustion controls, or malfunction of the equipment [20 DCMR 606.1]

Note that 20 DCMR 606 is subject to an EPA-issued call for a State Implementation Plan (SIP) revision (known as a “SIP call”) requiring the District to revise 20 DCMR 606. See “State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA’s SSM Policy Applicable to SIPs; Findings of Substantial Inadequacy; and SIP Calls To Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction”, 80 Fed. Reg. 33840 (June 12, 2015). It is likely that this federal action will result in changes to the requirements of 20 DCMR 606. Any such changes, once finalized in the DCMR, will supersede the language of Condition III(a)(1)(A) as stated above.

- B. An emission into the atmosphere of odorous or other air pollutants from any source in any quantity and of any characteristic, and duration which is, or is likely

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to be injurious to the public health or welfare, or which interferes with the reasonable enjoyment of life or property is prohibited. [20 DCMR 903.1]

2. Operational Limitations:

- A. The emergency generator set shall be operated for fewer than 500 hours in any 12-consecutive-month period. If operation of 500 hours or more is desired, the Permittee shall submit an application to amend this permit to comply with the requirements of 20 DCMR 805 and shall obtain the Department's approval of such application prior to initiating such operation. [20 DCMR 201]
- B. Except as specified in Condition III(a)(2)(C), the emergency generator set shall be operated only during emergencies resulting from electrical power outages due to: a failure of the electrical grid; on-site disaster; local equipment failure; or public service emergencies such as flood, fire, natural disaster, or severe weather conditions (e.g. hurricane, tornado, blizzard, etc.). [20 DCMR 201]
- C. The emergency generator set may be operated for the purpose of maintenance checks and readiness testing and in non-emergency situations for a period not to exceed one hundred (100) hours per calendar year as specified in Conditions III(a)(2)(C)(i) and (ii) below. Any such operation shall be considered as part of the 500 hours allowed under Condition III(a)(2)(A) above. [40 CFR 63.6640(f)]
 - i. The emergency generator set may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. [40 CFR 63.6640(f)(2)(i) and DCMR 201]; and
 - ii. The emergency generator set may be operated for up to fifty (50) hours per calendar year in non-emergency situations, subject to the following conditions [40 CFR 63.6640(f)(4) and 20 DCMR 201]:
 - 1. Any such operations shall be counted as part of the 100 hours per calendar year for maintenance and testing as provided in Condition III(a)(2)(C);
 - 2. These 50 hours of non-emergency operations per calendar year cannot be used for peak shaving, or as part of any program to supply power to generate income for the facility as part of a financial arrangement with another entity;
 - 3. All operations prohibited under Condition III(a)(2)(E) are also prohibited under this condition; and

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4. All operations resulting from a deviation in voltage or frequency from the electric provider to the premises shall be considered non-emergency operation and counted as part of this 50 hour per calendar year allowance.
- D. The Permittee shall purchase only diesel fuel that contains a maximum sulfur content of 15 ppm (0.0015 percent by weight) for use in the emergency generator set. [20 DCMR 201 and 20 DCMR 801] *Note that because the unit uses a common tank with the boilers, the sulfur content requirement has been aligned with that of the boilers.*
 - E. The emergency generator set shall not be operated in conjunction with a voluntary demand-reduction program or any other interruptible power supply arrangement with a utility, other market participant, or system operator. [20 DCMR 201]
 - F. The emergency generator set shall be operated and maintained in accordance with the manufacturer's emission-related written instructions or the Permittee shall develop and implement a written maintenance plan consistent with industry standards for similar models if manufacturer instructions are unavailable. Any Permittee-developed maintenance plan must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e), 40 CFR 63.6640(a), 40 CFR 63, Subpart ZZZZ, Table 6, and 20 DCMR 201]
 - G. In addition to the requirements of Condition III(a)(2)(F), the following maintenance activities shall be performed on the schedules specified [40 CFR 63.6603(a), 40 CFR 63.6640(a), and 40 CFR 60, Subpart ZZZZ, Table 2d]:
 - i. Change oil and filter every 500 hours of operation or annually¹, whichever comes first, except that sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) in order to extend this specified oil change requirement. If such an oil analysis program is to be used, the plan shall be submitted to the Department for review at the time of its establishment;
 - ii. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
 - iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
 - H. The Permittee shall minimize the generator engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate

¹ The annual deadlines will always be triggered first as long as compliance with Condition III(a)(2)(A) is maintained.

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and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63.6625(h)]

- I. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall maintain and operate the unit in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels required by this permit and 40 CFR 63, Subpart ZZZZ have been achieved. Determination of whether acceptable operating procedures are being used will be based on information available to the Department and the EPA Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, review of operation and maintenance records, and inspection of the source. [20 DCMR 201 and 40 CFR 63.6605]
3. Monitoring and Testing Requirements:
 - A. The Permittee shall monitor the date, time, duration, and reason for emergency generator startup to ensure compliance with Conditions III(a)(2)(A), (B), (C), and (E) of this permit. [20 DCMR 500.1]
 - B. In order to ensure compliance with Condition III(a)(2)(A), the Permittee shall monitor the total hours of operation each month with the use of a properly functioning, non-resettable hour metering device. Such a device must be installed if not already installed on the equipment. [40 CFR 63.6625(f) and 40 CFR 63.6655(f)]
 - C. The Permittee shall monitor and/or test fuel oil as necessary in accordance with Condition I(c)(1)(B)(ii) to ensure compliance with Conditions III(a)(2)(D) and III(a)(4)(C) of this permit. [20 DCMR 500.2 and 20 DCMR 502.6]
 4. Record Keeping Requirements:
 - A. The following information shall be recorded, initialed (except records generated automatically by an electronic system), and maintained in a log at the facility (or readily accessible electronically from the facility) for a period not less than five (5) years from the date the information is obtained [20 DCMR 500.8, 40 CFR 63.6660, 40 CFR 66.6655, and 40 CFR 63.10(b)]:
 - i. The date, time, duration, and reason for each start-up of the emergency generator, including the following specific information:
 1. If the unit is operated in non-emergency situations pursuant to Condition III(a)(2)(C)(ii), the specific purpose for each operation period must be recorded; and

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- b. **Emission Units: Boiler-1, Boiler-2, and Boiler-3:** Three 8.165 million BTU per hour Cleaver-Brooks Model CBI-200-200-125 boilers.

1. Emission Limits:

- A. The hourly emissions of criteria pollutants from each of these boilers shall not exceed those in the following table [20 DCMR 201]:

Pollutant	(Natural Gas) (lb/hr)	No. 2 Fuel Oil (lb/hr)
Carbon Monoxide (CO)	0.69	0.29
Oxides of Nitrogen (NO _x)	0.41	1.17
Sulfur Dioxide (SO ₂)	0.005	1.68

- B. Visible emissions shall not be emitted from these units except those discharges not exceeding 40% opacity (unaveraged) shall be permitted for two (2) minutes in any sixty (60) minutes period and for an aggregate of twelve (12) minutes in any twenty-four (24) hours period during start-up, cleaning, adjustment of combustion controls, or malfunction of the equipment. [20 DCMR 606.1]

Note that 20 DCMR 606 is subject to an EPA-issued call for a State Implementation Plan (SIP) revision (known as a “SIP call”) requiring the District to revise 20 DCMR 606. See “State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA’s SSM Policy Applicable to SIPs; Findings of Substantial Inadequacy; and SIP Calls To Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction”, 80 Fed. Reg. 33840 (June 12, 2015). It is likely that this federal action will result in changes to the requirements of 20 DCMR 606. Any such changes, once finalized in the DCMR, will supersede the language of Condition III(b)(1)(B) as stated above.

- C. Total suspended particulate matter (TSP) emissions from each boiler shall not exceed 0.11 pounds per million BTU. *Note that the Permittee is deemed to have complied with this requirement by complying with the operational limits specified in Condition III(b)(2)(A) and (B) of this permit unless emission testing results or other credible evidence of an exceedance is identified.* [20 DCMR 600.1]
- D. An emission into the atmosphere of odorous or other air pollutant from any source in any quality and of any characteristic, and duration which is, or likely to be injurious to the public health or welfare, or which interferes with the reasonable enjoyment of life and property is prohibited. [20 DCMR 903.1]
- D. NO_x and CO emissions shall not exceed those achieved with the performance of combustion process tune-ups as specified in Conditions III(b)(2)(E) and (F). [20

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DCMR 805.1(a), 20 DCMR 805.5(b), and 20 DCMR 805.9]:

2. Operational Limitations:

- A. The primary fuel for the boilers shall be natural gas. [20 DCMR 201]
- B. The alternative fuel for the boilers shall be No. 2 fuel oil or ultra-low-sulfur diesel fuel. The Permittee shall not purchase such fuels containing more than 0.0015 percent sulfur (15 ppm) by weight for use in the boilers, with the exceptions specified in Condition II(f) of this permit. [20 DCMR 801]
- C. The boilers shall operate on No. 2 fuel oil or diesel fuel only for the following reasons: [20 DCMR 201, 40 CFR 63.11195(e) and 40 CFR 63.11237]
 - i. During periods of gas supply emergencies;
 - ii. During periods of gas curtailment; or
 - iii. For periodic testing, maintenance, or operator training on liquid fuel not to exceed a combined total of 48 hours during any calendar year.
- D. Operations of each of these boilers, using No. 2 fuel oil or diesel fuel, shall be limited as follows [20 DCMR 201]:
 - i. Each boiler shall not operate on these fuels for more than 144 hours per 12-consecutive-month period; and
 - ii. Each boiler shall not use more than 8,398 gallons of these fuels per 12-consecutive-month period.
- E. The Permittee shall perform tune-ups biennially, prior to November 1 of the year of the tune-up², on each boiler in accordance with Condition III(b)(2)(F). The first tune-up was required to be performed during calendar year 2014. Subsequent tune-ups must be conducted no more than 25 months after the previous tune-up. [20 DCMR 805.5(b), 20 DCMR 805.9(b)(1)]
- F. In order to demonstrate continuous compliance, each tune-up required pursuant to Condition III(b)(2)(E) shall be performed to meet the following criteria: [20 DCMR 805.9(a)]
 - i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary for proper operation;

² The November 1 deadline is new, effective January 1, 2022.

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- ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
- iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly.
- iv. Optimize total emissions of NO_x, and to the extent possible, CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject; and
- v. Measure the concentrations in the effluent stream of CO and NO_x in ppmvd and O₂ in percent by volume dry basis, before and after the adjustments are made. Measurements may be made using a portable analyzer.

G. The boilers shall be maintained and operated at all times in a manner consistent with the manufacturer's specifications for the equipment. [20 DCMR 201]

H. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate each boiler in a manner consistent with good air pollution control practice for minimizing emissions and according to the manufacturer's recommended procedures. Determination of whether acceptable operating procedures are being used will be based on information available to the Department which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [20 DCMR 201]

3. Monitoring and Testing:

A. At least once during the term of this permit, the Permittee shall conduct performance tests on at least one of the three boilers (specifically, the one with the least current emissions test information available) to determine compliance with Conditions III(b)(1)(A) (except SO₂), (B) and (C) and shall furnish the District with a written report of the results of such performance tests in accordance with the following requirements [20 DCMR 502]:

- i. A test protocol shall be submitted in electronic form to air.quality@dc.gov a minimum of thirty (30) days in advance of the proposed test date. The test shall be conducted in accordance with Federal and District requirements.
- ii. The test protocol and test date(s) shall be approved by the Department prior to initiating any testing. The Department must have the opportunity to observe the test for the results to be considered for acceptance.

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- iii. The final results of the testing shall be submitted to the Department within sixty (60) days of the test completion. One (1) original test report and an electronic copy of the test report shall be submitted to the following addresses:

Chief, Compliance and Enforcement Branch
Department of Energy and Environment
Air Quality Division
1200 First Street NE, 5th Floor
Washington DC 20002

and

air.quality@dc.gov

- iv. The final report of the results shall include the emissions test report (including raw data from the test) as well as a summary of the test results and a statement of compliance or non-compliance with permit conditions to be considered valid. The summary of results and statement of compliance or non-compliance shall contain the following information:

1. A statement that the owner or operator has reviewed the report from the emissions testing firm and agrees with the findings.
2. Permit number(s) and condition(s) which are the basis for the compliance evaluation.
3. Summary of results with respect to each permit condition.
4. Statement of compliance or non-compliance with each permit condition.

- v. The results must demonstrate to the Department's satisfaction that the emission unit is operating in compliance with the applicable regulations and conditions of this permit; if the final report of the test results shows non-compliance the owner or operator shall propose corrective action(s). Failure to demonstrate compliance through the test may result in enforcement action.

- B. The Permittee shall comply with the requirements of Condition I(c)(1)(B) to ensure compliance with Condition III(b)(2)(B) of this permit.
- C. At least once per quarter when operating on natural gas and once per week when operating on No. 2 fuel oil or diesel fuel, during operation of each boiler, the Permittee shall conduct visual observations of the emissions from each boiler for a period of at least three minutes. Such visible emissions observations need not be performed in accordance with Reference Method 9, but may instead be only

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observations for the presence or absence of visible emissions (similar to the procedures set forth in EPA Reference Method 22). If no operations are occurring for a given boiler when observations are due, this shall be so noted and observations shall be performed during the next available period of operation.

If visible emissions are observed by this monitoring, or at any other time, the Permittee shall make arrangements for prompt visible emissions testing by a person certified in accordance with EPA Reference Method 9 (40 CFR 60, Appendix A). Such a test shall consist of a minimum of 30 minutes of opacity observations for the boiler in question and shall be performed while firing the same fuel as was in use when the visible emissions were observed.

- D. Regardless of whether or not emissions are observed pursuant to Condition III(b)(3)(C) of this permit, the Permittee shall conduct a minimum of one visible emissions test of each boiler every other calendar year (with the first required test in 2015, unless testing was performed in 2014) for each fuel burned since the last visible emissions test required under this permit condition. If the only combustion of a given fuel burned since the last test was burned during periodic testing or combustion adjustments required by this permit, no visible emission test for that fuel will be required under this condition. Such a test program shall consist of a minimum of 30 minutes of opacity observations of each boiler firing each fuel and shall be performed by a person certified in accordance with EPA Reference Method 9 (40 CFR 60, Appendix A).
- E. The Permittee shall monitor the number of hours each boiler is operated while firing No. 2 fuel oil or diesel fuel, the reasons for such operations, and fuel oil use quantities to ensure compliance with Conditions III(b)(2)(C) and (D).

4. Record Keeping and Reporting Requirements:

The Permittee shall maintain the following records for a period of not less than three (3) years from the date of each test, monitoring, sample measurement, report, application, or other activity, except where a longer period is specified herein. Such records must be kept in a form suitable and readily available for expeditious review and must be kept on-site or be accessible from a central location by computer or other means that instantly provides access at the site: [20 DCMR 500.8]

- A. The Permittee shall keep records of the results of all emissions testing required for the boilers pursuant to Conditions III(b)(3)(A) and I(a)(6). The results of such testing shall be reported as specified in Condition III(b)(3)(A).
- B. The Permittee shall maintain records of fuel information obtained pursuant to Condition III(b)(3)(B);

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- C. The Permittee shall maintain records of all visible emissions monitoring performed pursuant to Condition III(b)(3)(C) including notes indicating when no observations were performed as a result of no operations of a given boiler at the scheduled observation time. These records shall be maintained in an organized fashion, shall include the identity of the person performing the monitoring, and shall be readily available for inspection by the District.
- D. The Permittee shall maintain records of all Method 9 visible emissions testing performed pursuant to Conditions III(b)(3)(C) and (D). These records shall also include the identity of the person performing the visible emissions testing and documentation of his/her Method 9 certification. These records shall include documentation indicating whether the results show compliance with Condition III(b)(1)(B).
- E. The Permittee shall maintain records of the number of hours each boiler is operated using each fuel each month. These data shall be maintained in a rolling twelve-month sum format that shall be updated at least monthly to include the previous month's data. These data shall be reported pursuant to Condition I(c)(1).
- F. The Permittee shall maintain records of the amount of each fuel used each month in the boilers. These data shall be maintained in a rolling twelve month sum format that shall be updated at least monthly to include the previous month's data. These data shall be reported pursuant to Condition I(c)(1).
- G. The Permittee shall maintain records of the reason (e.g. gas curtailment, testing, etc.) and duration of each use of No. 2 fuel oil or diesel for each unit. These data shall be reported pursuant to Condition I(c)(1).
- H. The Permittee shall maintain records of the following information regarding each of the tune-ups of the combustion processes of the boilers required in Conditions III(b)(1)(D) and III(b)(2)(E) and (F) for each boiler and shall report the information in accordance with Condition I(c)(1) [20 DCMR 805.9(c)]:
 - i. The date on which the combustion process was last tuned-up;
 - ii. The name, title, and affiliation of the person who performed the tune-up;
 - iii. The NO_x concentrations in the effluent stream, in ppmvd, measured at high fire or typical operating load, before and after the tune-up;
 - iv. The CO concentrations in the effluent stream, in ppmvd, measured at high fire or typical operating load, before and after the tune-up;
 - v. The CO₂ concentrations in the effluent stream, in percent by volume dry basis,

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measured at high fire or typical operating load, before and after the tune-up;

vi. The O₂ concentrations in the effluent stream, in percent by volume dry basis, measured at high fire or typical operating load, before and after the tune-up;

vii. A description of any corrective actions taken as a part of the tune-up of the unit;

viii. The type and amount of fuel used over the 12 months prior to the tune-up of the unit, but only if the unit was physically and legally capable of using more than one type of fuel during that period, except that units sharing a fuel meter may estimate the fuel use by each unit; and

ix. Any other information that the Department may require.

I. The Permittee shall maintain records of the maintenance performed on the boilers to show compliance with Conditions III(b)(2)(G) and (H).

c. Emission Unit SSB1: Cross-draft, Model No. IESDDRF141020PSB, Paint Booth.

1. Emission Limitations:

A. No person shall discharge into the atmosphere more than fifteen (15) pounds of volatile organic compound (VOC) emissions in any one (1) day, nor more than three pounds (3 lb.) in any one (1) hour, from any combination of articles, machines, units, equipment, or other contrivances at the facility, not covered by a section of 20 DCMR Chapter 7 other than Section 700, unless the uncontrolled VOC emissions are reduced by at least ninety percent (90%) overall capture and control efficiency. [20 DCMR 700.2]

B. An emission into the atmosphere of odorous or other air pollutants from any source in any quantity and of any characteristic, and duration which is, or is likely to be injurious to the public health or welfare, or which interferes with the reasonable enjoyment of life or property is prohibited [20 DCMR 903.1]

C. Visible emissions shall not be emitted into the outdoor atmosphere from the paint spray booth. [20 DCMR 102.1 and 606]

2. Operational Limits and Standards:

A. No chemical strippers containing methylene chloride (MeCl) shall be used for paint stripping at the facility. [20 DCMR 201]

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- B. Adhesives, sealants, adhesive primers, or sealant primers shall not be used in the equipment unless they comply with the requirements of Condition II(m). [20 DCMR 743 through 749]
- C. Mobile equipment, as defined in 20 DCMR 799, shall not be coated in this paint booth. [20 DCMR 201]
- D. The exhaust stack shall have a minimum height of 15 feet and at least 5 feet above the roof level and shall be designed with sufficient height and configuration so as to ensure compliance with Condition III(c)(1)(B). [20 DCMR 201]
- E. The coatings, as defined in 20 DCMR 799, applied shall be by one or more of the following methods:
 - i. Powder coating;
 - ii. Hand-held, non-refillable aerosol containers;
 - iii. Non-atomizing application technology (paint brushes, rollers, hand wiping, flow coating, dip coating, touch-up markers, or marking pens);
 - iv. Other non-atomizing application technology approved by the Department to not be covered by applicable requirements not addressed in this permit; or
 - v. High volume low pressure (HVLV) spray guns.
- F. Whenever spray guns are used [20 DCMR 201]:
 - i. The coatings used shall not contain any compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd); and
 - ii. Cleaning of spray guns shall be performed by one of the following methods:
 - 1. Use of an enclosed spray gun cleaning system that is kept closed when not in use;
 - 2. Use of an unatomized discharge of solvent into a paint waste container that is kept closed when not in use;
 - 3. Disassembly of the spray gun and cleaning in a vat that is kept closed when not in use; or
 - 4. Use of an atomized spray into a paint waste container that is fitted with a device designed to capture atomized solvent emissions.

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- G. The paint spray booth shall meet the following specifications [20 DCMR 201]:
- i. The unit shall be fitted with a type of filter technology that is demonstrated to achieve at least 98-percent (98%) capture of paint overspray;
 - ii. The exhaust filters shall be replaced as specified by manufacturers' specifications;
 - iii. The unit shall be constructed with a full roof and must be ventilated at negative pressure so that air is drawn into the front opening any openings in the booth walls; and
 - iv. The unit shall be maintained and operated at all times in accordance with manufacturer's recommendations.
- H. The Permittee shall comply with the following housekeeping and pollution prevention measures [20 DCMR 201]:
- i. Store fresh and used coatings, solvent, and cleaning solvents in closed, non-absorbent, non-leaking containers;
 - ii. Close all coating containers at all times except when filling, emptying, or in active use;
 - iii. Store cloth and paper, or other absorbent applicators, moistened with coatings, solvents, or cleaning solvents in closed, non-absorbent, non-leaking containers; and
 - iv. Minimize spills during the handling and transfer of coatings, solvents, and cleaning solvents.
- I. At all times, including periods of startup, shutdown, and malfunction, the owner shall, to the extent practicable, maintain and operate the spray painting equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating procedures are being used will be based on information available to the Department which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [20 DCMR 107, 201, and 606]
3. Monitoring and Testing Requirements:
- A. The Permittee shall monitor the contents of any chemical strippers used at the facility to ensure that they do not contain methylene chloride (MeCl).

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- B. The Permittee shall track the quantity and volatile organic compound (VOC) content of all coatings used at the facility, as applied, to ensure compliance with Condition III(c)(1)(A). If applied, unadulterated, as the coating is obtained from the manufacturer, documentation provided by the manufacturer may be used to determine the VOC content.

Whenever such information is not available from the manufacturer or whenever a paint or coating is not applied as obtained from the manufacturer, the following method shall be used to determine the VOC content:

The mass of VOC per combined volume of VOC and coating solids, less water and exempt compounds shall be calculated, in pounds per gallon, by the following equation. To convert from grams per liter to pounds per gallon (lb/gal), multiply the result (VOC content) by 8.345×10^{-3} (lb/gal/g/l):

$$VOC = \frac{(W_v - W_w - W_{ec})}{(V - V_w - V_{ec})}$$

where:

VOC = VOC content in grams per liter (g/l) of coating less water and non VOC solvents;

W_v = Mass of total volatiles, in grams;

W_w = Mass of water, in grams;

W_{ec} = Mass of exempt compounds, in grams;

V = Volume of coating, in liters;

V_w = Volume of water, in liters; and

V_{ec} = Volume of exempt compounds, in liters; and

- C. The Permittee shall maintain an awareness of the area to ensure that the odor and nuisance air pollutant requirements of Condition III(c)(1)(B) are met.
- D. The Permittee shall monitor the emission point from the spray booth to ensure that the requirements of Condition III(c)(1)(C) are met.
- E. The Permittee shall monitor the material safety data sheets or other paint, coating, adhesive, sealant, adhesive primer, or sealant primer specification sheets to ensure compliance with Conditions III(c)(2)(B) and (F).
- F. The Permittee shall monitor the types of spray booth filters purchased and their replacement dates to ensure that all filters used meet the requirements of Conditions III(c)(2)(G)(i) and (ii).
- G. The Permittee shall monitor the maintenance and operational status of the spray booth, the activities performed in the spray booth, and similar and related

activities at other locations within the facility, to ensure compliance with the requirements of Conditions III(c)(2)(C), (E), (F), (G)(iii) and (iv), (H), and (I).

4. Record Keeping Requirements:

The Permittee shall maintain the following records for a period of not less than three (3) years from the date of each test, monitoring, sample measurement, report, application, or other activity, except where a longer period is specified herein. Such records must be kept in a form suitable and readily available for expeditious review and must be kept on-site or be accessible from a central location by computer or other means that instantly provides access at the site: [20 DCMR 500.8]

- A. The Permittee shall maintain records of the types of chemical paint strippers used at the facility as well as their chemical make-up to document compliance with Condition III(c)(2)(A).
- B. The Permittee shall maintain records of the quantity, type, and VOC content of all coatings subject to Condition III(c)(1)(A), used, as applied. The quantities of each coating shall be updated daily and summed monthly. These records shall be maintained for all coatings used:
 - i. In the paint booth; and
 - ii. At other locations within the facility.
- C. Based on the monitoring and calculations required under Condition III(c)(3)(B) and the records kept under Condition III(c)(4)(B), the Permittee shall determine and keep records of the VOCs emitted from this equipment, in combination with similar VOC emitting equipment at the facility to ensure compliance with Condition III(c)(1)(A).
- D. The Permittee shall maintain records of the type(s) and target hazardous air pollutant (HAP) contents of coatings used in any spray guns to document compliance with Condition III(c)(2)(F)(i) .
- E. The Permittee shall maintain records of the spray booth filter specifications and replacement dates to document compliance with Condition III(c)(2)(G).
- F. The Permittee shall maintain records of all maintenance performed on the spray booth.
- G. The Permittee shall maintain records of any deviations from the requirements of Conditions III(c)(2) and (3).

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5. Reporting Requirements:

None other than that specified in Condition I(c).

IV. Miscellaneous/Insignificant Activities:

The District does not consider the “miscellaneous activities” (also commonly known as “insignificant activities”) listed in the following table to be significant sources. However, as they have the potential to emit NO_x, the pollutant for which this facility has taken a synthetic minor limitation, in some quantity, their emissions must be considered to ensure the facility maintains the required minor source status.

Emission Unit ID	Emission Unit Description
B4	Fulton, Model 91863, 2.52 MMBTU/hr rated heat input dual fuel-fired boiler
B5	Fulton, Model 91863, 2.52 MMBTU/hr rated heat input dual fuel-fired boiler
B6	Fulton, Model 91863, 2.52 MMBTU/hr rated heat input dual fuel-fired boiler

These units shall comply with the following requirements:

- a. The miscellaneous activities are subject to the General Permit Requirements (Condition I) and Facility-Wide Permit Requirements (Condition II) of this permit;
- b. Emissions from the miscellaneous activities must be reasonably estimated, and the Permittee shall report the estimated emissions, as well as the specifics of the method(s) of estimation, in the annual emission statement required by Condition I(c)(2) of this permit [20 DCMR 500];
- c. Emission Limits:
 1. Total suspended particulate matter emissions from these Fulton shall not exceed 0.13 pounds per million BTU. [20 DCMR 600.1] *Note that the Permittee is deemed to have complied with this requirement by complying with the operational limits specified in Condition IV(d)(1) through (4) below, unless other credible evidence of a violation of this limit is identified.*
 2. Visible emissions shall not be emitted into the outdoor atmosphere from stationary sources (excluding fuel-burning equipment placed in initial operation before January 1, 1977); Provided, that discharges not exceeding forty percent (40%) opacity (unaveraged) shall be permitted for two (2) minutes in any sixty (60) minute period for an aggregate of twelve (12) minutes in any twenty-four hour (24 hr.) period during start-up, cleaning, soot blowing, adjustment of combustion controls, or

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malfunction of equipment. [20 DCMR 606.1]

Note that 20 DCMR 606 is subject to an EPA-issued call for a State Implementation Plan (SIP) revision (known as a “SIP call”) requiring the District to revise 20 DCMR 606. See “State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA’s SSM Policy Applicable to SIPs; Findings of Substantial Inadequacy; and SIP Calls To Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction”, 80 Fed. Reg. 33840 (June 12, 2015). It is likely that this federal action will result in changes to the requirements of 20 DCMR 606. Any such changes, once finalized in the DCMR, will supersede the language of Condition IV(c)(2) as stated above.

d. Operational Limits:

1. The primary fuel for the boilers shall be natural gas. [20 DCMR 201]
2. The alternative fuel for the boilers shall be No. 2 fuel oil or ultra-low-sulfur diesel (ULSD). The Permittee shall not purchase fuel oil containing more than 0.0015 percent sulfur (15 ppm) by weight for use in the boilers, with the exceptions specified in Condition II(f) of this permit. [20 DCMR 801]
3. The boilers shall operate on No. 2 fuel oil or diesel fuel only for the following reasons: [20 DCMR 201, 40 CFR 63.11195(e) and 40 CFR 63.11237]
 - A. During periods of gas supply emergencies;
 - B. During periods of gas curtailment; or
 - C. For periodic testing, maintenance, or operator training on liquid fuel not to exceed a combined total of 48 hours during any calendar year.
4. The fuel burning equipment shall be operated at all times in a manner consistent with the manufacturer’s specifications for the equipment. [20 DCMR 201]

e. Monitoring and Testing Requirements:

1. The Department reserves the right to require the Permittee to conduct performance tests on any of the fuel burning equipment for any reasonable purposes, in accordance with Condition I(a)(6). If such testing is required the Permittee shall furnish the Department with a written report of the results of such performance tests in accordance with the following requirements [20 DCMR 502]:
 - A. A test protocol shall be submitted in electronic form to air.quality@dc.gov a minimum of thirty (30) days in advance of the proposed test date. The test shall be

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conducted in accordance with Federal and District requirements.

- B. The test protocol and test date(s) shall be approved by the Department prior to initiating any testing. The Department must have the opportunity to observe the test for the results to be considered for acceptance.
- C. The final results of the testing shall be submitted to the Department within sixty (60) days of the test completion. One (1) original test report and an electronic copy of the test report shall be submitted to the following addresses:

Chief, Compliance and Enforcement Branch
Department of Energy and Environment
Air Quality Division
1200 First Street NE, 5th Floor
Washington DC 20002

and

air.quality@dc.gov

- D. The final report of the results shall include the emissions test report (including raw data from the test) as well as a summary of the test results and a statement of compliance or non-compliance with permit conditions to be considered valid. The summary of results and statement of compliance or non-compliance shall contain the following information:
 - i. A statement that the owner or operator has reviewed the report from the emissions testing firm and agrees with the findings.
 - ii. Permit number(s) and condition(s) which are the basis for the compliance evaluation.
 - iii. Summary of results with respect to each permit condition.
 - iv. Statement of compliance or non-compliance with each permit condition.
 - v. The results must demonstrate to the Department's satisfaction that the emission unit is operating in compliance with the applicable regulations and conditions of this permit; if the final report of the test results shows non-compliance the owner or operator shall propose corrective action(s). Failure to demonstrate compliance through the test may result in enforcement action.
2. The Permittee shall perform testing and/or keep records of fuel sulfur content pursuant to the requirements of Condition I(c)(1)(B).

3. The Permittee shall monitor fuel use to collect data on the quantities of each fuel used.

f. Record Keeping and Reporting Requirements:

The Permittee shall maintain the following records for a period of not less than three (3) years from the date of each test, monitoring, sample measurement, report, application, or other activity, except where a longer period is specified herein. Such records must be kept in a form suitable and readily available for expeditious review and must be kept on-site or be accessible from a central location by computer or other means that instantly provides access at the site: [20 DCMR 500.8]

1. The Permittee shall keep records of the results of all emissions testing required for the unit pursuant to Condition I(a)(6) and IV(e)(1).
2. The Permittee shall maintain records of the amount of fuel used in each unit each month. Where multiple units of this type are served by a single fuel meter, fuel usage may be aggregated where appropriate. These data shall be maintained in monthly and calendar year total formats.
3. The Permittee shall keep records of fuel data as required by Condition I(c)(1)(B).

g. Reporting Requirements:

None in addition to those specified in Condition I(c).