## **GOVERNMENT OF THE DISTRICT OF COLUMBIA**

Department of Energy and Environment

March 12, 2021

Colonel Michael J. Zuhlsdorf Commanding Officer Joint Base Anacostia-Bolling (JBAB) 20 MacDill Avenue, Suite 300 Washington DC 20032

Subject: <u>Draft Title V Operating Permit for Joint Base Anacostia-Bolling (Permit No. 042)</u>

#### Dear Colonel Zuhlsdorf:

The Air Quality Division (AQD) of the District of Columbia Department of Energy and Environment (the Department) has prepared a Draft Title V operating permit pursuant to Chapters 2 and 3 of Title 20 of the District of Columbia Municipal Regulations (20 DCMR 200 and 300). This permit, satisfying applicable regulations, is enclosed. Note that this permit, when issued, will be issued pursuant to the Department's authority under both Chapter 2 and Chapter 3, as mentioned above.

As the responsible official for the equipment covered by this permit at Joint Base Anacostia-Bolling, it will be your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit once it becomes final 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 March 12, 2021 and continuing through April 12, 2021. Joint Base Anacostia-Bolling, affected states (Maryland, Virginia, and West Virginia), the U.S. Environmental Protection Agency (EPA), and the general public may comment on the draft permit during this review period. Upon closing of this review period the permit may be modified to address comments received during this period. If no substantive comments are received during the public review period of the draft permit, the permit will continue with an EPA-only review period ending 45 days after the public review period began. If substantive comments are received, they will be addressed and the permit will then be issued as a proposed permit for EPA review only for a period of up to 45 days.

If EPA does not object to the issuance of the permit during their 45-day review period, the permit will be issued as a final permit and will become fully enforceable. If EPA raises objections during this period, the objections will be addressed as necessary by issuance of a modified draft permit.

If you have questions or comments or need further information, please write to this office or contact Abraham Hagos at (202) 535-1354 or <u>abraham.hagos@dc.gov</u>. If you submit comments





Joint Base Anacostia-Bolling
Draft Title V Operating Permit No. 042

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by email, please copy me at stephen.ours@dc.gov.

Sincerely,

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

Attachment: 1

SSO/ATH

cc: Theresa Fuller, Air Quality Program Manager, JBAB < via e-mail>
Paul D'Ornellas, Interim Regional Air Quality Program Manager, NAVFAC Washington < via email>

## District of Columbia Air Quality Operating Permit

Joint Base Anacostia-Bolling 370 Brookley Avenue SW Washington DC 20032-0101

Draft Title V Operating Permit Chapter 3 Permit No. 042-R1

ICIS-Air Facility ID: DC0000001100100061

Department of Energy and Environment Air Quality Division

Effective Date: TBD Expiration Date: TBD





#### **GOVERNMENT OF THE DISTRICT OF COLUMBIA**

Department of Energy and Environment

Chapter 3 Permit No. 042-R1 ICIS-Air Facility ID: DC0000001100100061 Effective Date: TBD Expiration Date: TBD

Pursuant to the requirements of Chapter 2, General and Non-Attainment Permits, and Chapter 3, Operating 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" as the duly delegated agency, 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**

(202) 535-1747

United States Department of the Air Force Joint Base Anacostia-Bolling 20 MacDill Ave Washington DC 20032

## **Facility Location**

Joint Base Anacostia-Bolling 370 Brookley Avenue SW Washington, DC 20032

Responsible Official: Co	lonel Michael J. Zuhlsdorf, Commanding Officer
PREPARED BY:	
Abraham T. Hagos	Date
<b>Environmental Engineer</b>	
Air Quality Division	
(202) 535-1354	
AUTHORIZED BY:	
Stephen S. Ours, P.E.	Date
Chief, Permitting Branch	
Air Quality Division	

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## I. General Permit Requirements

## a. Compliance

- 1. 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 302.1(g)(1)]
- 2. In any enforcement action, the Permittee cannot claim as a defense that it would have been necessary to halt or reduce a permitted activity in order to maintain compliance with this permit. [20 DCMR 302.1(g)(2)]
- 3. To demonstrate compliance, the Permittee must submit an Annual Certification Report to the Department not later than March 1 each year certifying compliance with all permit conditions. See Section I(d)(2) of this permit. [20 DCMR 302.3(e)(1)]
- 4. 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]
- 5. In the event of an emergency, as defined by 20 DCMR 399.1, noncompliance with the limits contained in this permit shall be subject to the following provisions [20 DCMR 302.7]:
  - A. An emergency constitutes an affirmative defense to an action brought for noncompliance with the technology-based emission limitations of this permit if the conditions of Condition I(a)(5)(B) are met.
  - B. The affirmative defense of an emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
    - i. An emergency occurred and that the Permittee can identify the cause(s) of the emergency;
    - ii. The permitted stationary source was at the time being properly operated;
    - iii. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of this permit; and
    - iv. The Permittee submitted notice of the emergency to the Department within two (2) working days of the time when emission limitations were exceeded due to the emergency. The notice shall contain description of the emergency,

any steps taken to mitigate emissions, and corrective actions taken pursuant to 20 DCMR 302.1(c)(3)(C)(i).

- C. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof; and
- D. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
- 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 101.1]

## c. Record Keeping

- 1. Where applicable to the monitoring, reporting, or testing requirements of this permit, the Permittee shall keep the following records [20 DCMR 302.1(c)(2)(A)(i-vi)]:
  - A. The date, place as defined in the permit, and time of sampling or measurements;
  - B. The date(s) analyses were performed;
  - C. The company or entity that performed the analyses;
  - D. The analytical techniques or methods used;
  - E. The results of the analyses; and
  - F. The operating conditions, as existing at the time of sampling or measurement.
- 2. The Permittee must keep and maintain records of all testing results, monitoring information, records, reports, and applications required by this permit for a period of at least five (5) years from the date of such test, monitoring, sample measurement, report or application. [20 DCMR 302.1(c)(2)(B)]
- 3. Unless more specific requirements are included in Condition III or Condition IV of this permit for a specific operation, for surface painting operations, printing

operations, and photograph processing operations, etc., as applicable, the Permittee shall maintain the following records [20 DCMR 500.1]:

- A. The names of the chemical compounds contained in the solvents, reagents, coatings, and other substances used in these activities;
- B. The volatile organic compound (VOC) content, measured in weight percent, of solvents used in these activities.
- C. The quantity of solvents (not including those that are subject to Condition II(m) of this permit) used in pounds per hour, and
- D. The number of hours that solvents were applied each day (exclusive of uses subject to Condition II(m) of this permit).
- 4. If Section 502(b)(10) changes are made pursuant to Condition I(k) of this permit, the Permittee shall maintain a copy of the notice with the permit. [20 DCMR 302.8(a)]
- 5. If off-permit changes are made pursuant to Condition I(l) of this permit, the Permittee shall keep a record of all such changes that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes. [20 DCMR 302.9(d)]

## d. Reporting Requirements

- 1. Semi-Annual Report: The Permittee shall submit semi-annual reports to the Department by March 1 and September 1 of each year. The September 1 report shall cover January 1 through June 30 of that year; the March 1 report shall cover July 1 through December 31 of the previous year. The March 1 report may be combined with the Annual Certification Report required pursuant to Condition I(d)(2) as long as all requirements of this Condition I(d)(1) are included in that report. 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. These reports shall contain the following information [20 DCMR 302.1(c)(3)(A) and (B)]:
  - A. Fuel use records in the format required by the unit-specific requirements of this permit;
  - B. All Method 9 visible emissions (opacity) observation results as well as the results of any non-Method 9 monitoring identifying visible emissions, per the unit-specific requirements of this permit;
  - C. The results of any other required monitoring referencing this section; and

- D. A description of any deviation from permit requirements during the period covered by the report.
- 2. Annual Certification Report: By March 1 of each year, the Permittee shall submit to the Department and EPA an Annual Certification Report certifying compliance with the terms and conditions of this permit. The report shall cover the period from January 1 through December 31 of the previous year. 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. [20 DCMR 302.1(c)(3) and 302.3(e)(1)]
  - A. The report shall [20 DCMR 302.3(e)(3)]:
    - i. Identify each term or condition of the permit that is the basis for certification;
    - ii. State the Permittee's current compliance status;
    - iii. Describe the testing, monitoring, and record keeping methods used to determine compliance with each emission limit, standard or other requirement over the reporting period; and
    - iv. State whether compliance has been continuous or intermittent during the reporting period for each emission limit, standard or other requirement as shown by these testing, monitoring, and record keeping methods.
  - B. The report shall include the following information for all fuel burning equipment and stationary internal combustion engines/generators.
    - i. 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 emission units identified as a miscellaneous activity in this permit. Natural gas use shall be reported in therms (where one therm equals 100 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]
    - ii. Quality of Fuel Information:
      - 1. 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.
      - 2. 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]:

- <u>a.</u> The fuel oil grade and the ASTM method used to determine the grade;
- <u>b.</u> The weight percent sulfur of the fuel oil;
- c. The date and time the sample was taken;
- <u>d.</u> The name, address, and telephone number of the laboratory that analyzed the sample; and
- <u>e.</u> 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.

- iii. Boiler and Engine Adjustment Data: For all boiler and engine adjustments required pursuant to the conditions of this permit, the Annual Certification Report shall include sufficient data to substantiate that each boiler and engine has been adjusted in accordance with 20 DCMR 805.8(a), (b), and (c) and any other related requirements specified in this permit. [20 DCMR 500.1]
- iv. Visible Emissions Test Data: For all EPA Reference Method 9 (40 CFR 60, Appendix A) testing required by this permit, the Annual Certification Report shall include:
  - 1. The date and time of each test;
  - 2. The name, address, and telephone number of the tester;
  - <u>3.</u> Proof of the certification of the tester pursuant to Reference Method 9;

- 4. Identification of the emission unit(s) being observed during the test;
- <u>5.</u> 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.
  - <u>a.</u> 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
  - <u>b.</u> The percent of rated capacity at which the engine or other equipment was operated during the test;
- 6. The amount and type of fuel fired during the test; and
- 7. Data from a minimum of 30 minutes of visible emissions observations.

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]

- C. As a supplement to the Annual Certification Report submitted to the Department, the Permittee shall submit a report of the emissions from the facility during the previous calendar year. This supplemental report shall be submitted in accordance with Condition I(d)(9) and (10) or by another method 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]:
  - i. Emissions of the following pollutants on a per fuel, per emission unit, and sum total basis as described above:
    - 1. Oxides of nitrogen  $(NO_x)$ ;

- 2. Sulfur dioxide (SO<sub>2</sub>);
- 3. Carbon monoxide (CO);
- 4. Volatile organic compounds (VOCs);
- 5. Lead (Pb) and lead compounds, as defined in 40 CFR 50.12;
- 6. Ammonia (NH<sub>3</sub>);
- 7. Particulate matter in each of the following categories:
  - <u>a.</u> Total particulate matter (total filterable plus condensable);
  - <u>b.</u> Total particulate matter less than 10 microns in aerodynamic diameter (PM10, also known as PM10-PRI), equivalent to PM10-FIL plus PM-CON;
  - c. Condensable particulate matter (PM-CON);
  - <u>d.</u> Filterable particulate matter less than 10 microns in aerodynamic diameter (PM10-FIL);
  - <u>e.</u> Total particulate matter less than 2.5 microns in aerodynamic diameter (PM2.5, also known as PM2.5-PRI), equivalent to PM2.5-FIL plus PM-CON; and
  - <u>f.</u> Filterable particulate matter less than 2.5 microns in aerodynamic diameter (PM2.5-FIL); and
- 8. All hazardous air pollutants (HAPs) as defined in §112(b) of the Clean Air Act, as revised.
- ii. Calculations and justification for each emission value reported in the summary table. 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:
  - 1. Continuous emission monitoring data,
  - <u>2.</u> Emissions data calculated based on emissions test data used with process operational/formulation data,

- 3. Emissions data calculated based on manufacturer's specifications used with process operational/formulation data, and finally,
- <u>4.</u> 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.

- iii. In addition to the summary table of total emissions during the calendar year, 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.
- D. As a second supplement to the Annual Certification Report, the Permittee shall submit the miscellaneous/insignificant activity inventory required pursuant to Condition IV(c).
- 3. Progress Reports: If the Permittee is subject to the requirements of a compliance schedule, it shall submit the reports specified in 20 DCMR 302.3(d). These reports shall include:
  - A. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
  - B. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- 4. Notifications and Supplemental Reports: Unless specifically exempted from these requirements elsewhere in this permit, the Permittee shall submit the following notifications and supplemental reports. Notifications or reports of a deviation from a 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 302.1(c)(3)(C)]
  - A. Emergencies: If the Permittee experiences an emergency, as defined in 20 DCMR 399.1, which results in the breach of a permit condition or exceedance of an emission limit, the Permittee shall submit a written notice to the Department within two (2) working days of the date the Permittee first becomes aware of the deviation if the Permittee wishes to assert an affirmative defense authorized under 20 DCMR 302.7. In addition, if the conditions of 20 DCMR 302.7(b) are not followed, the Permittee cannot assert the existence of an emergency as an

affirmative defense to an action brought for non-compliance with a technology-based limitation. [20 DCMR 302.1(c)(3)(C)(i)]

- B. 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 302.1(c)(3)(C)(ii)] This shall be reported to the Department's Emergency Operations number at (202) 645-5665.
- C. Emission Exceedance: The Permittee shall immediately, upon becoming aware, notify the Air Quality Division by telephone via the Department's Emergency Operations number at (202) 645-5665, of any exceedance of any emission limit or any limit established as a surrogate for emissions. Additionally, the Permittee shall submit to the Air Quality Division a written notice of such exceedance within two working days of discovery. [20 DCMR 500.1] Such written notice shall, at a minimum, include the following information:
  - i. The name and location of the facility;
  - ii. The subject source(s) that caused the excess emissions;
  - iii. The time and date of the first observation of the excess emissions;
  - iv. The cause and estimated/expected duration of excess emissions;
  - v. For sources subject to numerical emissions limitations, the estimated rate of emissions (expressed in the units of the applicable emissions limitation) and the operating data and calculations used in determining the magnitude of the excess emissions; and
  - vi. The proposed corrective actions and schedule to correct the conditions causing the excess emission.
- D. Operational Flexibility: Prior to making a change as provided for in Condition I(k) of this permit, titled "Section 502(b)(10) Changes" the Permittee shall give written notice to the Department and EPA at least seven calendar days before the change is to be made. The seven (7) calendar day period may be shortened or eliminated for an operational change that must be implemented more quickly to address unanticipated conditions that pose a significant health, safety, or environmental hazard. If less than a seven calendar day notice is given, the Permittee shall provide notice to the Department and EPA as soon as possible after learning of the need to make the change. In the notice, the Permittee must substantiate why seven-day advance notice could not be given. Written notices must include the following information [20 DCMR 302.8]:

- i. A description of the change to be made;
- ii. The date on which the change will occur;
- iii. Any changes in emissions; and
- iv. Any permit terms and conditions that are affected, including those that are no longer applicable.
- E. Off-Permit Changes: The Permittee shall provide contemporaneous written notice of off-permit changes, made in accordance with Condition I(l) of this permit, to the Department and EPA. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change. [20 DCMR 302.9(b)]
- F. 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 107.2]:
  - 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.
- 5. All notifications, reports, and other documentation required by this permit shall be certified by a responsible official, except that if a report of a deviation must be submitted within ten (10) days of the deviation, the report may be submitted in the first instance without a certification, if an appropriate certification is provided within ten (10) days thereafter, together with any corrected or supplemental information required concerning the deviation. [20 DCMR 302.1(c)(3)(D)]

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- 6. Nothing in this permit shall relieve the Permittee from any reporting requirements under federal or District of Columbia regulations.
- 7. Within 15 days of receipt of a written request, the Permittee shall furnish to the Department any information the Department requests to determine whether cause exists for reopening or revoking the permit, or to determine compliance with the permit. Upon request, the Permittee shall also furnish the Department with copies of records required to be kept by the permit. [20 DCMR 302.1(g)(5)]
- 8. 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 301.1(c). [20 DCMR 302.1(c)(3)(E) and 20 DCMR 106]
- 9. Unless otherwise specified in this permit, Annual Certification Reports, Semi-Annual Reports, notifications, supplemental reports, and other documentation required by this permit shall be sent in hard copy form to [20 DCMR 302.3(e)(4)]:

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

and in electronic form to:

air.quality@dc.gov

10. Annual Certification Reports must be submitted to EPA Region 3 in electronic form at the following email address. [20 DCMR 302.3(e)(4)]:

R3\_APD\_Permits@epa.gov

## e. Certification Requirements

With the exception specified in Condition I(d)(5), 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 responsible official, as defined in 20 DCMR 399.1, with the following language: "I certify, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete." [20 DCMR 301.6]

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#### f. Fees

The Permittee shall pay application and annual fees equal to the amount calculated by methods consistent with 20 DCMR 305. The application fees shall be submitted at the time of renewal application submittal. The annual fees shall be paid no later than 60 days after the Department issues an invoice each year. The check for the fees shall be made payable to the "D.C. Treasurer" and mailed to the following address or payment may be made by another method specified in the invoice [20 DCMR 302.1(h)]:

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

## g. Duty to Provide Supplemental Information

- 1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application or other submittal, the Permittee shall promptly submit to the Department the relevant supplementary facts and corrected information. [20 DCMR 301.2]
- 2. The Permittee shall promptly submit to the Department the information necessary to address any requirement that becomes applicable to the Permittee after the date the Permittee submitted any permit application. [20 DCMR 301.2]
- 3. Upon receipt of a written request, the Permittee shall furnish to the Department, within a reasonable time established by the Department:
  - A. Any information that the Department determines is reasonably necessary to evaluate or take final action on a permit application; [20 DCMR 301.1(b)(7)]
  - B. Any information the Department requests to determine whether cause exists to reopen, revise, terminate, or revoke this permit, or to determine compliance with the terms and conditions of this permit; [20 DCMR 302.1(g)(5)] and
  - C. Copies of any record(s) required to be kept by this permit. [20 DCMR 302.1(g)(5)]

## h. Construction, Installation, or Alteration

1. 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.

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2. When construction, installation, or alteration has been performed, the Permittee shall take all actions required by 20 DCMR 301 to obtain a revision of the Title V operating permit to reflect the new or modified equipment.

## i. Permit Renewal, Expiration, Reopening, Revision, and Revocation

- 1. This permit expires five (5) years after its effective date [20 DCMR 302.1 (b)], but may be renewed before it expires pursuant to 20 DCMR 303.
  - A. The Permittee shall file an application for renewal of this permit at least six (6) months before the date of permit expiration. [20 DCMR 301.1(a)(5)] Compliance with this requirement may be waived if the Permittee has submitted a request for permit termination by this deadline.
  - B. The Permittee's right to operate ceases on the expiration date unless a complete permit renewal application has been submitted to the Department not later than six (6) months prior to the expiration date or the Department has taken final action approving the source's application for renewal by the expiration date. [20 DCMR 301.1(a)(5) and 303.3(b)].
  - C. If a timely and complete application for renewal of this permit is submitted to the Department, but the Department, through no fault of the Permittee, fails to take final action to issue or deny the renewal permit before the end of the term of this permit, then this permit shall not expire until the renewal permit has been issued or denied. [20 DCMR 303.3(e)]
  - D. An application for renewal may address only those portions of the permit that require revision, supplementing, or deletion, incorporating the remaining permit terms by reference from the previous permit. The Department may similarly, in issuing a draft renewal permit or proposed renewal permit, specify only those portions that will be revised, supplemented, or deleted, incorporating the remaining permit terms by reference. [20 DCMR 303.1(a) and 303.3(a) through (c)]
- 2. This permit may be amended at any time in accordance with the requirements of 20 DCMR 303.4 or 303.5, as applicable.
- 3. This permit shall be reopened for cause if any of the following occur [20 DCMR 303.6(a)]:
  - A. The Department or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms of the permit;

- B. Additional applicable requirements under the Clean Air Act become applicable to the facility; provided, that reopening on this ground is not required if the following occurs:
  - i. The facility is not a major source;
  - ii. The permit has a remaining term of less than three (3) years;
  - iii. The effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 20 DCMR 303.3(e); or
  - iv. The additional applicable requirements are implemented in a general permit that is applicable to the facility and the facility receives approval for coverage under that general permit;
- C. Additional requirements (including excess emissions requirements) become applicable to a source under the Acid Rain program; provided, that upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit; or
- D. The Department or EPA determines that the permit must be revised to assure compliance by the source with applicable requirements.
- 4. While a reopening proceeding is pending, the Permittee shall be entitled to the continued protection of any permit shield provided in this permit pending issuance of a modified permit unless the Department specifically suspends the shield on the basis of a finding that the suspension is necessary to implement applicable requirements. If such a finding applies only to certain applicable requirements or to certain permit terms, the suspension shall extend only to those requirements or terms. [20 DCMR 303.6(f)]
- 5. This permit may be reopened for modifications or revoked for cause by EPA in accordance with 20 DCMR 303.7.
- 6. The Department may terminate a permit in accordance with 20 DCMR 303.8 at the request of the Permittee or revoke it for cause. Cause for revocation exists if the following occurs [20 DCMR 303.8(a)]:
  - A. The permitted stationary source is in violation of any term or condition of the permit and the Permittee has not undertaken appropriate action (such as a schedule of compliance) to resolve the violation;

- B. The Permittee has failed to disclose material facts relevant to issuance of the permit or has knowingly submitted false or misleading information to the Department;
- C. The Department finds that the permitted stationary source or activity substantially endangers public health, safety, or the environment, and that the danger cannot be removed by a modification of the terms of the permit;
- D. The Permittee has failed to pay permit fees required under 20 DCMR 305 and Section I(f) of this permit; or
- E. The Permittee has failed to pay a civil or criminal penalty imposed for violations of the permit.
- 7. 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 303.8(f)]
- 8. The Permittee may apply for termination of this permit on the ground that its operations, activities, and emissions are fully covered by a general permit for which it has applied for and received coverage pursuant to 20 DCMR 302.4. [20 DCMR 303.8(g)]
- 9. Except as provided under 20 DCMR 303.5(b) for minor permit modifications, the filing of a permit reopening, revocation or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [20 DCMR 302.1(g)(3)]

## j. 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.

## k. Section 502(b)(10) Changes

Under the following conditions, the Permittee is expressly authorized to make Clean Air Act ("the Act") Section 502(b)(10) changes without a permit amendment or permit modification provided that such a change is not a modification under any provision of Title I of the Act, does not include any changes in the date(s) included in any compliance schedule, and does not result in a level of emissions exceeding the emissions allowed under the permit, whether expressed herein as a rate of emissions or in terms of total emissions: [20 DCMR 302.8]

- 1. Before making a change under this provision, the Permittee shall provide advance written notice to the Department and to the Administrator, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected including those which are no longer applicable. The Permittee shall thereafter maintain a copy of the notice with the permit, and the Department shall place a copy with the permit in the public file. The written notice shall be provided to the Department and the Administrator at least seven (7) days before the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to the unanticipated conditions, the Permittee shall provide notice to the Department and the Administrator immediately upon learning of the need to make the change;
- 2. A permitted source may rely on the authority of this section to trade increases and decreases in emissions within the stationary source, where the applicable requirements provide for the emissions trades without a permit revision. In such a case, the advance written notice provided by the Permittee shall identify the underlying authority authorizing the trading and shall state when the change will occur, the types and quantities of emissions to be traded, the permit terms or other applicable requirements with which the source will comply through emissions trading, and any other information as may be required by the applicable requirement authorizing the emissions trade;
- 30. Any permit shield provided under Condition V of this permit pursuant to 20 DCMR 302.6 shall not apply to changes made under this section, except those provided for in Condition I(k)(4) of this permit; however, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the changes; provided, that the Permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The shield may be reinstated for emissions and operations affected by the change:

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- A. If subsequent changes cause the stationary source's operations and emissions to revert to those contained in the permit and the Permittee resumes compliance with the terms and conditions of the permit; or
- B. If the Permittee obtains a significant modification to the permit pursuant to Condition I(i) of this permit to codify the change in the permit, and the modified permit expressly provides protection under the shield for the change; and
- 4. Upon the request of the Permittee, the Department shall issue a permit that contains terms and conditions allowing for the trading of emissions increases and decreases in the permitted stationary source solely for the purpose of complying with a federally-enforceable emissions cap that is established in the permit independent of otherwise applicable requirements. The Permittee shall include in its application proposed replicable procedures and permit terms that assure that the emissions trades are quantifiable and enforceable and comply with all applicable requirements and 20 DCMR Sections 302.1 and 302.3. The permit shield under Condition V of this permit shall apply to permit terms and conditions authorizing such increases and decreases in emissions. Under this paragraph, the written notification required under this section shall state when the change will occur and shall describe the changes in emissions that will result and how these increases and decreases in emissions will comply with the terms and conditions of the permit.

## 1. Off-Permit Changes

The Permittee may make any change in its operations or emissions not addressed or prohibited in this permit without obtaining an amendment or modification of this permit subject to the following requirements and restrictions [20 DCMR 302.9]:

- 1. The change shall meet all applicable requirements and may not violate any existing permit term or condition;
- 2. The Permittee shall provide contemporaneous written notice of the change to the Department and the Administrator. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change;
- 3. The change shall not qualify for any permit shield found in Condition V of this permit;
- 4. The Permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes; and

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5. The Permittee may not make, without a revision of its permit, a change that is not addressed or prohibited by its permit if such change is subject to any requirements under Title IV of the Act or is a modification under any provision of Title I of the Act.

## m. Economic Incentives

This permit shall require no revision under any approved economic incentives, marketable permits, emissions trading, or other similar programs or processes for changes that are provided for in this permit. [20 DCMR 302.1(i)]

## n. Emissions Trading and Averaging

There are no applicable emissions trading or averaging applicable at this facility, unless otherwise specified in this permit. [20 DCMR 302.1(k)]

#### o. Entry and Inspection

The Permittee shall allow authorized officials of the District, upon presentation of identification, to [20 DCMR 302.3(b) and 20 DCMR 101] *Note: This is a streamlined condition. The requirements of 20 DCMR 302.3(b) are more stringent than those of 20 DCMR 101, thus this permit only incorporates the conditions of 20 DCMR 302.3(b). Compliance with these conditions will be considered compliance with both regulations*:

- 1. Enter upon the Permittee's premises where a source or emission unit is located, an emissions related activity is conducted, or where records required by this permit are kept;
- 2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of this permit;
- 3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
- 4. As authorized by the federal Clean Air Act, as amended [42 U.S.C. 7401 et seq.] and D.C. Official Code § 8-101.05a, sample or monitor, at reasonable times, any substance or parameter for the purpose of assuring compliance with this permit or any applicable requirement.

#### p. Enforcement

1. Failure to comply with the federally enforceable terms and conditions of this permit constitutes a violation of the federal Clean Air Act. The District, EPA, and/or citizens

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may enforce federally enforceable permit terms and conditions. [20 DCMR 302.2(a) and 20 DCMR 302.1(g)(1)]

- 2. Failure to comply with the terms and conditions of this permit designated as a District-only requirement constitutes a violation of the District of Columbia air quality laws and regulations. The Department will enforce these permit terms and conditions. [20 DCMR Chapter 1]
- 3. Failure to comply with permit terms and conditions is grounds for enforcement action, permit revocation, or for denial of a permit renewal application [20 DCMR 302.1(g)(1)]; and/or administrative, civil, or criminal enforcement action. [20 DCMR 105]
- 4. In any enforcement proceeding, the Permittee shall have the burden of proof when seeking to establish the existence of an emergency. [20 DCMR 302.7(c)]
- 5. This permit may be amended, reopened, modified, revoked, or reissued for cause in accordance with 20 DCMR 303 and Condition I(i) of this permit. Except as provided under 20 DCMR 303.5, the filing by the Permittee of a request for a permit revision, termination, or notification of planned changes or anticipated noncompliance, does not stay any term or condition of this permit. [20 DCMR 302.1(g)(3)]

## q. Property Rights

This permit does not convey any property rights of any sort or any exclusive privilege to the Permittee. [20 DCMR 302.1(g)(4)]

## r. Severability

The provisions of this permit are severable. If any part of this permit is held invalid, the remainder of this permit shall not be affected thereby and shall remain valid and in effect. [20 DCMR 302.1(f)]

## s. Alternative Operating Scenarios

No alternative operating scenarios are applicable unless specified in the emission unit specific conditions of this permit (Condition III). [20 DCMR 302.1(j)]

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## **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]

#### 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

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"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:

- 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;
- 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

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(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\* pertaining to handling of asbestos-containing materials.

## 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):
  - 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:
  - 1. ASTM D 396, "Standard Specification for Fuel Oils"; or
  - 2. ASTM D 975, "Standard Specification for Diesel Fuel Oils";
- iii. To determine the sulfur concentration of fuels:
  - 1. ASTM D 129, "Standard Test Method for Sulfur in Petroleum Products (General Bomb Method)";
  - 2. ASTM D 1266, "Standard Test Method for Sulfur in Petroleum Products (Lamp Method)";
  - 3. ASTM D 1552, "Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method)";
  - 4. ASTM D 2622, "Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry";
  - ASTM D 4294, "Test Method for Sulfur in Petroleum and Petroleum Products by Energy Dispersive X-ray Fluorescence Spectrometry;" or
  - 6. ASTM D 5453, "Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Spark Ignition Engine Fuel, Diesel Engine Fuel, and Engine Oil by Ultraviolet Fluorescence;" and
- iv. Other methods developed or approved by the Department or EPA.
- 9. The following recordkeeping and reporting requirements shall apply to any purchase, sale, offering for sale, storage, transportation, or use of commercial fuel oil in the District:
  - A. On or after the applicable compliance dates specified in Conditions II(f)(2) and (3), at the time of delivery, the transferor of commercial fuel oil shall provide to

the transferee an electronic or paper record of the fuel data described as follows, which must legibly and conspicuously contain the following information:

- i. The date of delivery;
- ii. The name, address, and telephone number of the transferor;
- iii. The name and address of the transferee;
- iv. The volume of fuel oil being sold or transferred;
- 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 five (5) years; *Note that this is a streamlined requirement. Compliance with the five* (5) *year record keeping requirement in 20 DCMR 302.1(c)(2)(B) will ensure compliance with the three (3) year record keeping requirement in 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 (a) in electronic or paper format for not less than five (5) years, unless the transfer or use of the fuel oil occurs at a private residence; *Note that this is a streamlined requirement. Compliance with the five* (5) year record keeping requirement in 20 DCMR 302.1(c)(2)(B) will ensure compliance with the three (3) year record keeping requirement in 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)(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
- 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.

#### 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 gasoline sold at the facility 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)]

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## 1. Protection of Stratospheric Ozone

The Permittee shall comply with the protection of stratospheric ozone requirements contained in 40 CFR 82 as follows [20 DCMR 302.1 and 399.1 "Applicable Requirement" (k)]:

- 1. If the Permittee manufactures, transforms, destroys, imports, or exports a Class I or Class II substance, the Permittee is subject to all the requirements as specified in 40 CFR 82, Subpart A (Production and Consumption Controls).
- 2. If the Permittee performs a service on a motor vehicle that involves an ozone-depleting substance refrigerant or regulated substitute substance in the MVAC, then Permittee is subject to all the applicable requirements as specified in 40 CFR 82, Subpart B (Servicing of Motor Vehicle Air Conditioners).
- 3. The Permittee shall comply with the ban on nonessential products containing Class I substances and ban on nonessential products containing or manufactured with Class II substances as specified in 40 CFR 82, Subpart C.
- 4. The Permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR 82 Subpart E, as applicable.
- 5. The Permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, as applicable.
- 6. The Permittee may switch from any ozone-depleting substance to any alternative that is listed as acceptable in the Significant New Alternatives Policy (SNAP) program promulgated pursuant to 40 CFR 82, Subpart G.
- 7. Halon Emissions Reduction: Any person testing, servicing, maintaining, repairing or disposing of equipment that contains halons or using such equipment during technical training and any person disposing of halons, manufacturers of halon blends, and organizations employing technicians who service halon containing equipment shall comply with the requirements of 40 CFR 82, Subpart H.
- 8. The Permittee shall comply with the ban on refrigeration and air-conditioning appliances containing HCFCs as specified in 40 CFR 82, Subpart I.

#### m. 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.**<sup>1</sup>

<b>Coating Category</b>	VOC Content Limit
	(Grams VOC per liter) <sup>2</sup>
Flat Coatings	100
Non-flat Coatings	150
Non-flat- High Gloss Coatings	250

Specialty Coatings	<b>VOC Content Limit</b>	
	(Grams VOC per liter) <sup>2</sup>	
Antenna Coatings	530	
Antifouling Coatings	400	
Bituminous Roof Coatings	300	
Bituminous Roof Primers	350	
Bond Breakers	350	
Calcimine Recoater	475	
Clear Wood Coatings		
	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 <sup>3</sup>	120	
Magnesite Cement Coatings	450	
Mastic Texture Coatings	300	
Metallic Pigmented Coatings	500	
Multi-Color Coatings	250	
Nuclear Coatings	450	

Specialty Coatings	VOC Content Limit
	(Grams VOC per liter) <sup>2</sup>
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

<sup>&</sup>lt;sup>1</sup> Limits 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.

- 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]

<sup>&</sup>lt;sup>2</sup>Conversion factor: one pound VOC per gallon (U.S.) = 119.95 grams per liter.

<sup>&</sup>lt;sup>3</sup> Units for this coating are grams of VOC per liter (pounds of VOC/gallon) of coating, including water and exempt compounds.

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5. Notwithstanding the provisions of Condition II(m)(1) of this permit, a person or 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]

#### n. 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(n)(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(n)(1)(D) and II(n)(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	(g/L) 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

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	<b>VOC Limits in</b>
	(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	<b>VOC Limits in</b>
CATEGORY 4: SEALANT PRIMERS	
	VOC Limits in (g/L) 250
Architectural – non-porous material Architectural – porous material	(g/L)
Architectural – non-porous material	( <b>g/L</b> ) 250
Architectural – non-porous material Architectural – porous material	(g/L) 250 775
Architectural – non-porous material Architectural – porous material Marine deck	(g/L) 250 775 760
Architectural – non-porous material Architectural – porous material Marine deck Other	(g/L) 250 775 760 750
Architectural – non-porous material Architectural – porous material Marine deck Other CATEGORY 5: ADHESIVES APPLIED TO	(g/L) 250 775 760 750 VOC Limits in
Architectural – non-porous material Architectural – porous material Marine deck Other CATEGORY 5: ADHESIVES APPLIED TO PARTICULAR SUBSTRATES	(g/L) 250 775 760 750 VOC Limits in (g/L)
Architectural – non-porous material Architectural – porous material Marine deck Other CATEGORY 5: ADHESIVES APPLIED TO PARTICULAR SUBSTRATES Flexible vinyl	(g/L) 250 775 760 750 VOC Limits in (g/L) 250
Architectural – non-porous material Architectural – porous material Marine deck Other  CATEGORY 5: ADHESIVES APPLIED TO PARTICULAR SUBSTRATES Flexible vinyl Fiberglass	(g/L) 250 775 760 750 VOC Limits in (g/L) 250 200

Adhesive, sealant, adhesive primer or sealant primer category	VOC content limit (grams VOC per liter <sup>#</sup> )
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(n)(1)(A) for adhesives applied to particular substrates (such as, Category 5), shall apply as follows [20 DCMR 744.3]:
  - 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(n)(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(n)(1)(D) and II(n)(2), any person subject to Condition II(n) using a surface preparation or cleanup solvent shall [20 DCMR 744.4]:
  - i. Except as provided in Condition II(n)(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(n)(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
  - iv. Remove an adhesive, sealant, adhesive primer, or sealant primer from the

parts of spray application equipment by:

- 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(n) who wishes to comply with Conditions II(n)(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(n) 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(n), 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(n) is to be used at any location in the District of Columbia. [20 DCMR 744.7]
- 2. Exemptions and exceptions to Condition II(n) are as follows: [20 DCMR 745]
  - A. Condition II(n) 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(n)(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.

- B. The requirements of Condition II(n) 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(n)(2)(E).
- C. The provisions of Condition II(n) (except Condition II(n)(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(n)(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(n)(2)(B)(iv) through II(n)(2)(D) shall record and maintain monthly operational records sufficient to demonstrate compliance, and in accordance with Conditions II(n)(3) and (4). [20 DCMR 745.5]
- F. Condition II(n) 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(n)(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

- 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(n)(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(n) 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(n) 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(n)(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(n) 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.

#### o. General Conformity

As a department, agency, or instrumentality of the Federal Government, the Permittee shall comply with the General Conformity requirements of 20 DCMR 1501 and 40 CFR 93, Subpart B, as amended.

#### **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 Department 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 300].

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	Emission Units <sup>1</sup>					
Emission Unit ID	Emission Unit Location	Ch. 2 Permit No. <sup>2</sup>	Description			
CU-18-1, CU-18-2, & CU-18-3	Building 18 - Boiler Room	6745-R1, 6746-R1, & 6747-R1	Three (3) 30.25/28.82 million BTU per hour (MMBTU/hr) natural gas-fired Indeck International-Lamont (IBW) Boilers (these boilers are dual-fuel boilers, but are not permitted to burn a secondary fuel)			
CU-6000A-1 CU-6000A-2	Building 6000A - Penthouse	-	Two (2) 8 MMBTU/hr dual fuel fired (natural gas and No. 2 fuel oil) Unilux Boilers			
EG-B1-2	Building B1 - (south of building)	-	One (1) 125 kWe Cummins generator set with 207 horsepower (hp) diesel engine (manufactured 7/24/2006 and installed 1/24/2007)			
EG-3-1	Building 3 - outside (east of building)	-	One (1) 200 kWe Cummins generator set with 320 hp diesel engine (manufactured 11/26/2007 and installed 5/27/2008)			
EG-5-2	Building 5/16 - outside (across street in southeast corner of the parking lot)	6538	One (1) 175 kWe Cummins generator set with 364 hp diesel engine (manufactured 12/5/2011 and installed 4/28/2012)			
EG-20-1	Building 20 - outside (north of building)	-	One (1) 300 kWe Marathon Electric generator set with 685 hp diesel engine (manufactured 10/2008 and installed 4/2009)			
EG-21-1	Building 21 - (south of Building 53)		One (1) 40 kWe Kohler generator set with 64 hp diesel engine (manufactured 12/8/2006 and installed 1/15/2008)			
EG-54-1	Building 54 - , outside (east of building)	- /	One (1) 400 kWe Cummins generator set with 755 hp diesel engine (manufactured 1/20/2009 and 11/2009)			
EG-350-1	Building 350 - outside (south of building)	7059	One (1) 125 kWe Cummins generator set with 197 hp diesel engine (manufactured 5/01/2012 and installed 10/2013)			
EG-351-1	Building 351 - outside (west of building)	6673	One (1) 300 kWe Cummins generator set with 464 hp diesel engine (manufactured and installed 2013)			
EG-370-1	Building 370/371 - outside (north of Building 371)	-	One (1) 40 kWe Marathon Electric generator set with 80 hp diesel engine (manufactured 4/17/2008 and installed 4/2009)			
EG-391-1	Building 391 - outside (patio east of building)	6403	One (1) 1,000 kWe Cummins generator set with 1,490 hp diesel engine (manufactured 1/2011 and installed 2011)			
EG-391-2	Building 391 - outside (east of building)	-	One (1) 86 hp diesel fire pump engine (manufactured 4/2011 and installed 2011)			
EG-485-1 EG-485-2	Building 485 - outside (east of building)	6525 & 6526	Two (2) 1,500 kWe Caterpillar generator set with 2,206 hp diesel engine (manufactured 2008 and installed 2008)			
EG-1300-1	Building 1300 - outside (south of building)		One (1) 350 kWe Marathon generator set with 685 hp diesel engine (manufactured 2008 and installed 3/2009)			
EG-1302-1	Building 1302- , outside (west of building)	-	One (1) 100 kWe Marathon Electric generator set with 173 hp diesel engine (manufactured 10/28/2008 and installed 5/2009)			
EG-1304-2	Building 1304A- outside (west of building)	6965	One (1) 80 kWe Cummins generator set with 145 hp diesel engine (manufactured 12/9/2014 and installed 4/2015)			

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		Emission	Units <sup>1</sup>
Emission Unit ID	<b>Emission Unit Location</b>	Ch. 2 Permit No. <sup>2</sup>	Description
EG-4570-1	Building 4570 - 2nd Floor Penthouse	-	One (1) 20 kWe Tradewinds generator set with 45 hp diesel engine (manufactured 9/2013 and installed 2/2014)
EG-5681-1	Building 5681 - outside (south of R.V. Maisey Building)	-	One (1) 600 kWe Cummins generator set with 1,220 hp diesel engine (manufactured 2/18/2009 and installed 04/2009)
EG-6000-2	Building 6000 - Powerhouse	-	One (1) 2,000 kWe Cummins generator set with 2,920 hp diesel engine (manufactured 9/3/2015 and installed 2015)
EG-6000-5	Building 6000 - outside (near powerhouse loading dock)	-	One (1) 2,000 kWe Cummins generator set with 2,920 hp diesel engine (manufactured 9/9/2007 and installed circa 2008)
EG-73-1	Building 73 - Generator Room (south side of building)		One (1) 165 kWe Caterpillar generator set with 265 hp diesel engine (manufactured and installed circa 1970)
EG-94-1	Building 94 - outside (southwest corner of building)	-	One (1) 400 kWe Katolight generator set with 635 hp diesel engine (manufactured 11/2001 and installed 2004)
EG-165-1	Building 165 - outside (northeast of Building 169, adjacent to Brookley Ave)	-	One (1) 130 kWe Generac generator set with 198 hp diesel engine (manufactured 4/1996 and installed circa 1997)
EG-398-1	Building 398 - Mechanical Room (inside)	-	One (1) 900 kWe Caterpillar generator set with 1,305 hp diesel engine (manufactured 5/18/1989 and installed 1991)
EG-398-2 EG-398-3 EG-398-4	Building 398 - Fire Pump Room	-	Three (3) 231 hp diesel engines (manufactured 1988 and installed 1991)
EG-408-1	Building 408 - Emergency Generator Room		One (1) 1,100 kWe Caterpillar generator set with 1,847 hp diesel engine (manufactured 6/21/1989 and installed 1989)
EG-408-2	Building 408 - Emergency Generator Room	-	One (1) 1,100 kWe Caterpillar generator set with 1,847 hp diesel engine (manufactured 6/30/1989 and installed 1989)
EG-410-1	Building 410/411 - outside (east of Building 411 and west of Building 410)	-	One (1) 400 kWe Katolight generator set with 634 hp diesel engine (manufactured 1995 and installed circa 1996)
EG-B421-1	Building B421	-	One (1) 125 kW Kohler generator set with 190 hp diesel engine (manufactured 8/7/2004 and installed 1/20/2007)
EG-1304-1	Building 1304 - outside (west of building)	-	One (1) 175 kWe Cummins generator set with 277 hp diesel engine (manufactured 12/6/1999 and installed 11/1/2001)
EG-6000-1	Building 6000 – Powerhouse	-	One (1) 2,000 kWe Cummins generator set with 2,920 hp diesel engine (manufactured 5/14/2005 and installed Fall 2006)
EG-6000-3	Building 6000 – Powerhouse	-	One (1) 2,000 kWe Cummins generator set with 2,920 hp diesel engine (manufactured 5/5/2005 and installed Fall 2006)

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	Emission Units <sup>1</sup>				
Emission Unit ID	Emission Unit Location	Ch. 2 Permit No. <sup>2</sup>	Description		
EG-6000-4	Building 6000 – Powerhouse	-	One (1) 2,000 kWe Cummins generator set with 2,920 hp diesel engine (manufactured 5/16/2005 and installed Fall 2006)		
EG-6000A-1	Building 6000A – Penthouse	-	One (1) 1,500 kWe Cummins generator set with 2,200 hp diesel engine (manufactured 5/24/2004 and installed circa 2005)		
EG-6000A-2	Building 6000A – Penthouse	-	One (1) 1,500 kWe Cummins generator set with 2,200 hp diesel engine (manufactured 5/26/2004 and installed circa 2005)		
EG-6000A-3	Building 6000A – Penthouse	-	One (1) 1,500 kWe Cummins generator set with 2,200 hp diesel engine (manufactured 5/24/2004 and installed circa 2005)		
EG-7400-1	Building 7400 - outside (east of building)	6632	One (1) 1,000 kWe Cummins generator set with 1,490 hp diesel engine (generator set manufactured 2013 and installed circa 2013 using refurbished model year 2002 engine)		
EG-6126-1	Building 6126 (south of building inside fence)	-	One (1) 20 kWe Generac generator set with 45 hp diesel engine (generator manufactured 11/5/2007 and installed circa 2008; engine model year unknown)		
EG-8034-1	Building 8034		60 kWe generator set with 98 hp natural gas engine (manufactured August 2010 and installed October 2010)		
EG-91-1	Building 91	-	60 kWe generator set with 105 hp natural gas engine (manufactured January 2007 and installed March 2009)		
TK-90-1	Building B90 – by the water (north of building 2482)		One (1) 6,000 gallon gasoline underground storage tank (UST) for boat refueling		
TK-365-1	Building 365 - Adjacent to building		One (1) 10,000 gallon gasoline UST for government vehicle refueling		
TK-365-2	Building 365 - Adjacent to building	-	One (1) 10,000 gallon E-85 UST for government vehicle refueling		
TK-1311-1, TK-1311-2, TK-1311-3, TK-1311-4	Building 1311 - west of building	-	Four (4) 12,000 gallon gasoline USTs for vehicle refueling		
PB-399-1	Building 399 - 1st floor adjacent to wood working shop	6543	One (1) paint booth room for wood and metal items		
PB-399-2	Building 399 - 2nd floor	-	One (1) enclosed paint booth room for metal items		
PB-4472-1	Building 4472 - 1st floor adjacent to wood working shop	-	One (1) paint booth room for wood and personal craft items		
PB-411-1	Building 411 - Room 66A - Curtained paint booth	-	One (1) paint booth room for vehicle priming and preparation		
PB-411-2	Building 411 - Room 66A - Enclosed paint booth	-	One (1) enclosed paint booth room for vehicle painting		

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Emission Units <sup>1</sup>				
Emission Unit ID	Emission Unit Location	Ch. 2 Permit No. <sup>2</sup>	Description	
PB-362-1	Building 362 - 1st floor	-	One (1) enclosed paint booth room for vehicle painting	
DG-411-1	Building 411 paint mix room	-	Remote reservoir parts washer for paint booth spray guns, Herkules Model GW/R, Serial No. 606320	
DG-411-2	Building 411 garage bay	-	Immersion degreaser for transmission parts, Zep Model Dyna Brute	
PM-397-1	Building 397	-	Indoor firing range with three-stage filter	
PM-371-1	Building 371 Woodshop	-	Dust collector for wood working shop	
PM-399-2	Building 399 1st Floor Wood Working Shop	7269	Arrest All AR6-25 dust collector for wood working shop, Serial No. ARS190016	

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

a. <u>Emission Units: CU-18-1, CU-18-2, and CU-18-3 dual fuel fired boilers</u>
Three (3) 30.25 MMBTU/hr natural gas-fired Indeck International-Lamont (IBW), Model TJW-C25 boilers at Building 18, Boiler Room.<sup>1</sup>

#### 1. Emission Limitations:

A. Each of the three (3) boilers shall not emit pollutants in excess of those specified in the following table [20 DCMR 201]:

Boiler Emission Limits (CU-18-1, CU-18-2, and CU-18-3)						
Pollutant	Short-Term Limit (Natural Gas) (lb/hr) From Each Boiler Individually	Total Combined Annual Emissions From the Three Boilers (ton/yr) <sup>¥</sup>				
Carbon Monoxide (CO)	1.119	7.755				
Oxides of Nitrogen (NO <sub>x</sub> )	1.210	8.385				
PM Total (includes total filterable plus condensables)	0.145	1.004				
Volatile Organic Compounds (VOC)	0.091	0.631				
Sulfur Dioxide (SO <sub>2</sub> )	0.015	0.104				

<sup>&</sup>lt;sup>¥</sup>Total combined annual emissions based on annual operational limit set in Condition III(a)(2)(F).

<sup>1</sup> These units are capable of burning No. 2 fuel oil and were previously permitted to do so. However, at the request of the Permittee, this authorization has been removed along with associated regulatory requirements.

<sup>2</sup>The Chapter 2 permit numbers listed here are for reference only. The requirements of the Chapter 2 permits have been incorporated into this permit and the separate Chapter 2 permit documents are no longer maintained.

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- B. Total suspended particulate matter (TSP) emissions from each of the boilers shall not exceed 0.08 pounds per MMBTU. [20 DCMR 600.1]
- C. Visible emissions shall not be emitted into the outdoor atmosphere from the boilers; except that discharges no greater than 40% opacity (unaveraged) shall be permitted for two (2) minutes in any sixty (60) minute period and for an aggregate of twelve (12) minutes per twenty-four hour (24 hr.) period during start-up, cleaning, soot blowing, 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)(C) as stated above.

- D. 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 and property is prohibited. [20 DCMR 903.1]\*
- E. NO<sub>x</sub> and CO emissions shall not exceed those achieved with the performance of annual combustion adjustments on each boiler. To show compliance with this condition, the Permittee shall, each calendar year, perform adjustments of the combustion processes of the boilers with the following characteristics [20 DCMR 805.5(a) and 805.8(a) and (b)]:
  - Inspection, adjustment, cleaning or replacement of fuel burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer;
  - ii. Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of NO<sub>x</sub> and, to the extent practicable, minimize emissions of CO;
  - iii. Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer; and

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iv. Adjustments shall be made such that the maximum emission rate for any contaminant does not exceed the maximum allowable emission rate as set forth in this section.

#### 2. Operational Limitations:

- A. The sole fuel permitted for use in the boilers shall be natural gas<sup>2</sup>. No other fuels are approved for use in these boilers. [20 DCMR 201]
- B. The Permittee shall perform tune-ups on each unit at least once per calendar year. Such tune-ups shall be performed pursuant to Conditions III(a)(1)(E) and III(a)(4)(F). [20 DCMR 805]
- C. No more than two (2) of these boilers shall operate at any given time.[20 DCMR 201]
- D. Total operations of these boilers, in aggregate, shall not exceed 13,860 hours in any given 12-month rolling period. Standby or warm-up of any of these three (3) boilers is considered to be operation mode and the time in such a state shall be counted toward the 13,860 hour limit. Any exceedance of this limit may be considered a violation of 20 DCMR 204 as this limit was taken to avoid applicability of that regulation. [20 DCMR 201] *Note that this hours of operation limit has been established to avoid applicability of 20 DCMR 204 and therefore must be maintained in future permits.*
- E. The boilers shall be operated at all times in a manner consistent with the manufacturer's specifications for the equipment. [20 DCMR 201]
- F. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the units 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 201]

 $<sup>^2</sup>$  These units are capable of burning No. 2 fuel oil and were previously permitted to do so. However, at the request of the Permittee, this authorization has been removed along with associated regulatory requirements.

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#### 3. Monitoring and Testing Requirements:

- A. The Permittee shall monitor the operation of the boilers in a manner consistent with a good preventive maintenance program.
- B. The Permittee shall monitor the stack outlets and identify any visible emissions to ensure that if they occur, the problem is identified and repaired.
- C. At least once per month during operation of the equipment, the Permittee shall observe each stack 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 observations for the presence or absence of visible emissions (similar to the procedures set forth in EPA Reference Method 22). If any unit is not used during a given month, this shall be so noted and such records shall be maintained in accordance with Condition III(a)(4)(C).

If visible emissions are observed by this monitoring, or at any other time, the Permittee shall either shut the process down and make the necessary repairs/adjustments to correct the cause of the visible emissions or shall make arrangements for prompt observation by an individual certified in accordance with EPA Reference Method 9 to determine compliance with Conditions III(a)(1)(C).

- D. Regardless of whether or not emissions are observed pursuant to Condition III(a)(3)(D) of this permit, the Permittee shall conduct a minimum of one visible emissions test of each boiler each calendar year. Visible emission testing pursuant to Condition III(a)(3)(E) will be considered to meet the requirements of this condition for the year when it is performed. Such a test program shall consist of a minimum of 30 minutes of opacity observations of each boiler and shall be performed by a person certified in accordance with EPA Reference Method 9 (40 CFR 60, Appendix A).
- E. At least once after October 23, 2019, and no later than April 30, 2021, the Permittee shall conduct performance tests on the three boilers to determine compliance with Conditions III(a)(1)(A), (B), and (C) (except VOC and SOx), 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. One (1) original test protocol shall be submitted to the following address 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.

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- ii. The test protocol and 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.
- 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 shall be submitted to the address in Condition III(a)(3)(E)(i) above.
- 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 Permittee has reviewed the report from the emissions testing firm and agrees with the findings.
  - <u>2.</u> Permit number(s) and condition(s) which are the basis for the compliance evaluation.
  - 3. Summary of results with respect to each permit condition.
  - <u>4.</u> 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 Permittee shall propose corrective action(s). Failure to demonstrate compliance through the test may result in enforcement action.
- H. The Permittee shall conduct and allow the Department access to conduct tests of air pollution emissions from any source as requested. [20 DCMR 502.1]

#### 4. Record Keeping and Reporting Requirements:

The following information shall be recorded and maintained in accordance with Condition I(c) and reported as specified herein: [20 DCMR 302.1(c)(2)(B) and 20 DCMR 500.2 and 500.8]

- A. The Permittee shall keep records of the results of all emissions testing required for the three boilers pursuant to Conditions III(a)(3)(E) and I(a)(6). [20 DCMR 302.1(c)(2)(B) and 20 DCMR 500.8]
- B. The Permittee shall maintain records of all visible emissions monitoring performed pursuant to Condition III(a)(3)(C) including notes indicating when no observations were performed as a result of no operations of a given boiler on a given fuel that quarter or week, as applicable. 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 Department. [20 DCMR 302.1(c)(2)(B) and 20 DCMR 500.8].
- C. The Permittee shall maintain records of all Method 9 visible emissions testing performed pursuant to Conditions III(a)(3)(C), (D) and (E) in accordance with the requirements specified in Condition I(c). 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 Conditions III(a)(1)(C). [20 DCMR 302.1(c)(2)(B) and 20 DCMR 500.8].
- D. The Permittee shall keep records of fuel use for each boiler, showing therms or standard cubic feet of natural gas combusted each month. These records shall be summed on a calendar year basis.
- E. The Permittee shall keep records of the dates, times, and duration each boiler is operated each month to show compliance with Conditions III(a)(2)(C) and (D). Additionally, total hours of operation for both boilers shall be maintained in a 12-month rolling sum format to show compliance with Condition III(a)(2)(D).
- F. The Permittee shall keep records of the following information regarding the combustion adjustments required pursuant to Condition III(a)(1)(E) and III(a)(2)(B): [20 DCMR 805.8(c)]
  - i. The date on which the combustion process was last adjusted;
  - ii. The name, title, and affiliation of the person who made the adjustments;
  - iii. The NO<sub>x</sub> emission rate, in ppmvd, after the adjustments were made;
  - iv. The CO emission rate, in ppmvd, after the adjustments were made;
  - v. The CO<sub>2</sub> concentration, in percent (%) by volume dry basis, after the adjustments were made;

- vi. The O<sub>2</sub> concentration, in percent (%) by volume dry basis, after the adjustments were made; and
- vii. Any other information that the Department may require.
- G. The Permittee shall keep records of all maintenance performed on the boilers so as to document compliance with Conditions III(a)(2)(E) and (F). These records shall be initialed to attest to their accuracy.
- H. The Permittee shall submit the results of all testing required by Conditions III(a)(3)(E) and I(a)(6) as specified in Condition III(a)(3)(E) except that the Department may specify and require different submittal procedures to be followed in cases of testing required pursuant to condition I(a)(6).
- b. Emission Units: CU-6000A-1 and CU-6000A-2 dual fuel fired boilers
  Two (2) 8.0 MMBTU/hr dual fuel fired (natural gas/No. 2 fuel oil) Unilux boilers (CU-6000A-1 and CU-6000A-2) at Building 6000A, Penthouse.

#### 1. Emission Limitations:

A. Each of the boilers shall not emit pollutants in excess of those specified in the following tables [20 DCMR 201]:

Boiler Emission Limits per Unit (CU-6000A-1 and CU-6000A-2)						
Pollutant	Short-Term Limit Short-Term Limit (N					
	(Natural Gas) (lb/hr)	Fuel Oil) (lb/hr)				
CO	0.725	0.315				
$NO_x$	0.862	1.257				
PM Total (includes total						
filterable plus condensables)	0.017	0.125				
$SO_x$	0.005	0.012				

- B. TSP emissions from each boiler shall not exceed 0.11 pound per MMBTU. [20 DCMR 600.1]
- C. Visible emissions shall not be emitted into the outdoor atmosphere from the boilers; except that discharges no greater than 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 (24) hour period during start-up, cleaning, soot blowing, 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)(C) as stated above.

- D. 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 and property is prohibited. [20 DCMR 903.1]\*
- E. NO<sub>x</sub> and CO emissions shall not exceed those achieved with the performance of annual combustion adjustments on each boiler. To show compliance with this condition, the Permittee shall, each calendar year, perform adjustments of the combustion processes of the boilers with the following characteristics [20 DCMR 805.1(a)(4) and 805.8(a) and (b)]:
  - i. Inspection, adjustment, cleaning or replacement of fuel burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer;
  - ii. Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of NO<sub>x</sub> and, to the extent practicable, minimize emissions of CO;
  - iii. Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer; and
  - iv. Adjustments shall be made such that the maximum emission rate for any contaminant does not exceed the maximum allowable emission rate as set forth in this section.

#### 2. Operational Limitations:

- A. The primary fuel for the boilers shall be natural gas. No. 2 fuel oil or diesel fuel shall only be used in accordance with Condition III(b)(2)(C). No other fuels are approved for use in these boilers. [20 DCMR 201]
- B. The alternative fuel for the boilers shall be No. 2 fuel oil. The sulfur content of any No. 2 fuel oil purchased for use in this equipment shall contain no greater

than 0.0015% sulfur by weight (15 ppm), with the exceptions specified in Condition II(f). [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. The Permittee shall perform tune-ups on each unit at least once per calendar year, burning the fuel that provided the majority of the heat input during the 12 months prior to the tune-up. Such tune-ups shall be performed pursuant to Conditions III(b)(1)(E) and III(a)(4)(G). [20 DCMR 805]
- E. The boilers shall be operated at all times in a manner consistent with the manufacturer's specifications for the equipment. [20 DCMR 201]
- F. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the units 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 201]

#### 3. Monitoring and Testing:

- A. If the Department requests testing of this equipment in accordance with Condition I(a)(6), the Permittee shall conduct performance tests on each of the boilers to determine compliance with Condition III(b)(1)(A) and (B) (except SO<sub>2</sub> which can be shown by fuel sulfur content) for both allowable fuels and shall furnish the Department with a written report of the results of such performance tests in accordance with the following requirements [20 DCMR 502]:
  - i. One (1) original test protocol shall be submitted to the following address 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.

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- ii. The test protocol and 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.
- 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 shall be submitted to the address in Condition III(b)(3)(A)(i) above.
- 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:
  - <u>1.</u> A statement that the Permittee has reviewed the report from the emissions testing firm and agrees with the findings.
  - <u>2.</u> 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 Permittee 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(d)(2)(B)(ii) to ensure compliance with Condition III(b)(2)(B) of this permit.
- C. At least once per month when operating on natural gas and once per week when operating on No. 2 fuel oil, during operation of the equipment, the Permittee shall observe each stack 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 observations for the presence or absence of visible emissions (similar to the procedures set forth in EPA Reference Method 22). If any unit is

not used during a given month, this shall be so noted and such records shall be maintained in accordance with Condition III(b)(4)(C).

If visible emissions are observed by this monitoring, or at any other time, the Permittee shall either shut the process down and make the necessary repairs/adjustments to correct the cause of the visible emissions or shall make arrangements for prompt observation by an individual certified in accordance with EPA Reference Method 9 to determine compliance with Conditions III(b)(1)(C).

- 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 each calendar year for each fuel burned since the last visible emissions test required by this condition. If the only combustion of No. 2 fuel oil burned in a given boiler 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 fuel use, both to collect data on the quantities of each fuel used, and to ensure that any time fuel oil is burned, such usage is in compliance with Condition III(b)(2)(C).

#### 4. Record Keeping and Reporting Requirements:

The following information shall be recorded and maintained in accordance with Condition I(c) and reported as specified herein: [20 DCMR 302.1(c)(2)(B) and 20 DCMR 500.2 and 500.8]

- A. The Permittee shall keep records of the results of all emissions testing required for the boiler pursuant to Conditions III(b)(3)(A) and I(a)(6).
- B. The Permittee shall maintain records of fuel information obtained pursuant to Condition III(b)(3)(B).
- 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 on a given fuel that quarter. 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 Department.

- 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 Conditions III(b)(1)(C).
- E. The Permittee shall keep records of fuel use for each boiler, showing therms or standard cubic feet of natural gas combusted each month as well as gallons of No. 2 fuel oil combusted each month. These records shall be summed on a calendar year basis.
- F. The Permittee shall keep records of the dates, times, and duration of operation of each boiler whenever No. 2 fuel oil is combusted. In addition, the Permittee shall keep records of the reason for each use of No. 2 fuel oil to document compliance with Condition III(b)(2)(C). These records shall include a separate accounting for the dates and duration of No. 2 fuel oil use for each boiler each calendar year during periodic testing, maintenance, or operator training to show compliance with Condition III(a)(2)(C)(iii).
- G. The Permittee shall keep records of the following information regarding the combustion adjustments required pursuant to Condition III(b)(1)(E) and III(b)(2)(D): [20 DCMR 805.8(c)]
  - i. The date on which the combustion process was last adjusted;
  - ii. The name, title, and affiliation of the person who made the adjustments;
  - iii. The NO<sub>x</sub> emission rate, in ppmvd, after the adjustments were made;
  - iv. The CO emission rate, in ppmvd, after the adjustments were made;
  - v. The CO<sub>2</sub> concentration, in percent (%) by volume dry basis, after the adjustments were made;
  - vi. The O<sub>2</sub> concentration, in percent (%) by volume dry basis, after the adjustments were made; and
  - vii. Any other information that the Department may require.
- I. The Permittee shall keep records of all maintenance performed on the boilers so as to document compliance with Conditions III(b)(2)(E) and (F). These records shall be initialed to attest to their accuracy.

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- J. The Permittee shall submit the results of all testing required by Conditions III(b)(3)(A) and I(a)(6) as specified in Condition III(b)(3)(A) except that the Department may specify and require different submittal procedures to be followed in cases of testing required pursuant to condition I(a)(6).
- c. <u>Emission Units: New Source Performance Standards (NSPS) Compression Ignition Internal Combustion Engines (CI-ICE)</u>

Twenty-one (21) emergency diesel-fired engines subject to the NSPS (40 CFR 60, Subpart IIII) as follows:

Equipment Location	Unit ID	Chapter 2 Permit No.†	<b>Emission Unit Description</b>	Generator Set / Engine Serial Numbers
Building B1 - outside (south of building)	EG-B1-2	-	One (1) 125 kWe Cummins generator set with 207 horsepower (hp) diesel engine (manufactured 7/24/2006 and installed 1/24/2007)	K060988102/ 46643982
Building 3 - outside (east of building)	EG-3-1	-	One (1) 200 kWe Cummins generator set with 320 hp diesel engine (manufactured 11/26/2007 and installed 5/27/2008)	K070128191 / 21811128
Building 5/16 - outside (across street in southeast corner of the parking lot)	EG-5-2	6538	One (1) 175 kWe Cummins generator set with 364 hp diesel engine (manufactured 12/5/2011 and installed 4/28/2012)	L110280135 / 73325919
Building 20 - outside (north of building)	EG-20-1	-	One (1) 300 kWe Marathon Electric generator set with 685 hp diesel engine (manufactured 10/2008 and installed 4/2009)	MX12-12791- 1108 / 303227-3- 1-0908
Building 21 - (south of Building 53)	EG-21-1	-	One (1) 40 kWe Kohler generator set with 64 hp diesel engine (manufactured 12/8/2006 and installed 1/15/2008)	2140760 / PE3029T633304
Building 54 - outside (east of building)	EG-54-1	-	One (1) 400 kWe Cummins generator set with 755 hp diesel engine (manufactured 1/20/2009 and 11/2009)	A090229326 / 79355926
Building 350 - outside (south of building)	EG-350-1	7059	One (1) 125 kWe Cummins generator set with 197 hp diesel engine (manufactured 5/1/2012 and installed 10/2013)	J130571761 / 4990443 04 81-04- 070
Building 351 -	EG-351-1	6673	One (1) 300 kWe Cummins	A130440842 /

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Equipment Location	Unit ID	Chapter 2 Permit No.†	<b>Emission Unit Description</b>	Generator Set / Engine Serial Numbers
outside (west of building)			generator set with 464 hp diesel engine (manufactured and installed 2013)	73487489
Building 370/371 - outside (north of Building 371)	EG-370-1	-	One (1) 40 kWe Marathon Electric generator set with 80 hp diesel engine (manufactured 4/17/2008 and installed 4/2009)	687471-04-08 / PE4024L003424
Building 391 - outside (patio east of building)	EG-391-1	6403	One (1) 1,000 kWe Cummins generator set with 1,490 hp diesel engine (manufactured 1/2011 and installed 2011)	C110196039 / 372247885
Building 391 - outside (east of building)	EG-391-2	-	One (1) 86 hp diesel fire pump engine (manufactured 4/2011 and installed 2011)	N/A / PE40451167049
Building 485 - outside (east of building)	EG-485-1 and EG- 485-2	6525 & 6526	Two (2) 1,500 kWe Caterpillar generator sets with 2,206 hp diesel engines (manufactured 2008 and installed 2008)	G4W00513 / SBG00439 and G4W00512 / SBG00436
Building 1300 - outside (south of building)	EG-1300-1	-	One (1) 350 kWe Marathon generator set with 685 hp diesel engine (manufactured 2008 and installed 3/2009)	MX-127189-1108 / 303227-7-1-1208
Building 1302- outside (west of building)	EG-1302-1	-	One (1) 100 kWe Marathon Electric generator set with 173 hp diesel engine (manufactured 10/28/2008 and installed 5/2009)	MX-127728-1108 / PE4045L069236
Building 1304A- outside (west of building)	EG-1304-2	6965	One (1) 80 kWe Cummins generator set with 145 hp diesel engine (manufactured 12/9/2014 and installed 4/2015)	L140775285 / P1411126221
Building 4570 - 2nd Floor Penthouse	EG-4570-1	-	One (1) 20 kWe Tradewinds generator set with 45 hp diesel engine (manufactured 9/2013 and installed 2/2014)	34885 / Unknown
Building 5681 - outside (south of RV Maisey Building)	EG-5681-1	-	One (1) 600 kWe Cummins generator set with 1,220 hp diesel engine (manufactured 2/18/2009 and installed 04/2009)	B09023595 / Unknown

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Equipment Location	Unit ID	Chapter 2 Permit No.†	<b>Emission Unit Description</b>	Generator Set / Engine Serial Numbers
Building 6000 - Powerhouse	EG-6000-2	-	One (1) 2,000 kWe Cummins generator set with 2,920 hp diesel engine (manufactured 9/3/2015 and installed 2015)	D050773511 / 33204159
Building 6000 - outside (near powerhouse loading dock)	EG-6000-5	-	One (1) 2,000 kWe Cummins generator set with 2,920 hp diesel engine (manufactured 9/9/2007 and installed circa 2008)	Unknown / 33170173

The Chapter 2 permit numbers listed here are for reference only. The requirements of the Chapter 2 permits have been incorporated into this permit and the separate Chapter 2 permit documents are no longer maintained.

#### 1. Emissions Limitations

A. Emissions from these units shall not exceed those found in the following table as measured according to the procedures set forth in 40 CFR 89, Subpart E for NMHC, NOx, and CO and 40 CFR 89.112(c) for PM. [40 CFR 60.4205, 40 CFR 60.4202, and 40 CFR 89.112(a)-(c)]

	Emission Standards (g/kWm-hr)					
Unit ID	NMHC+	HC	NOx	CO	PM	
	NOx					
EG-B1-2		1.3	9.2	11.4	0.54	
EG-3-1	4.0			3.5	0.20	
EG-20-1	4.0			3.5	0.20	
EG-21-1			9.2			
EG-54-1	5.8			3.5	0.16	
EG-350-1	4.0			3.5	0.20	
EG-351-1	4.0			3.5	0.20	
EG-370-1	5.0			5.0	0.40	
EG-391-1	6.4			3.5	0.20	
EG-391-2	4.7				0.35	
EG-485-1 and EG-485-2	6.4			3.5	0.18	
EG-1300-1	4.0			3.5	0.20	
EG-1302-1	4.0			5.0	0.30	
EG-1304-2	4.0			5.0	0.30	
EG-4570-1	7.5			5.5	0.30	
EG-5681-1	6.4			3.5	0.20	
EG-6000-2	6.4			3.5	0.20	
EG-6000-5	6.4		_	3.5	0.20	

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B. Visible emissions shall not be emitted into the outdoor atmosphere from these units, 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 24-hour period during start-up, cleaning, soot blowing, adjustment of combustion controls, or 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 III(c)(1)(B) as stated above.

- C. Except EG-B1-2, EG-21-1, and EG-391-2, in addition to Condition III(c)(1)(B), exhaust opacity, measured and calculated as set forth in 40 CFR 86, Subpart I, shall not exceed [40 CFR 60.4205(b), 40 CFR 60.4202(a), 40 CFR 89.113, and (for EG-4570-1) 40 CFR 1039.105(b)]:
  - i. 20 percent during the acceleration mode;
  - ii. 15 percent during the lugging mode;
  - iii. 40 percent during the peaks in either the acceleration or lugging modes. *Note:* This condition is streamlined with the requirements of 20 DCMR 606.1.
- D. 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]\*

#### 2. Operational Limitations

A. The emergency generators sets and fire pump shall be operated for fewer than 500 hours, each, 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 conditions of 20 DCMR 805 and shall obtain the Department's approval of such application prior to initiating such operation. [20 DCMR 201 and 20 DCMR 805.1(c)]

- B. Except as specified in Condition III(c)(2)(C) below, the emergency engines and fire pumps shall be operated only during emergencies as follows [20 DCMR 201]:
  - i. For engines associated with emergency generators, 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.); and
  - ii. For the engine associated with the fire pump, any fire emergency.
- C. Each of the emergency generators and the fire pump 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(c)(2)(C)(i) and (ii) below. Any such operation shall be considered as part of the 500 hours allowed under Condition III(c)(2)(A) above. [40 CFR 60.4211(f)]
  - i. The emergency generators and fire pump 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 60.4211(f)(2)(i) and DCMR 201]; and
  - ii. The emergency generators may be operated for up to fifty (50) hours per calendar year in non-emergency situations, subject to the following conditions [40 CFR 60.4211(f)(3) 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(c)(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(c)(2)(F) are also prohibited under this condition. [40 CFR 60.4211(f)(3) and 20 DCMR 201]; and
    - 4. All operations of the emergency generator 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 emergency generators and fire pump shall fire only diesel fuel that contains a maximum sulfur content of 15 parts per million (0.0015 percent by weight) and either a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent. [40 CFR 60.4207(b)]
- E. The emergency generators and fire pump shall be operated and maintained in accordance with the recommendations of the equipment manufacturer. [40 CFR 60.4211(a)(1) and 20 DCMR 201]
- F. The emergency generators 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]
- G. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the units 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.

#### 3. <u>Monitoring and Testing Requirements:</u>

- A. The Permittee shall monitor the date, time, duration, and reason for each emergency generator startup to ensure compliance with Conditions III(c)(2)(A), (B), (C), and (F). [20 DCMR 500.2 and 20 DCMR 302.1(c)(1)(B) and (C)]
- B. In order to ensure compliance with Condition III(c)(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. [40 CFR 60.4209(a) and 40 CFR 60.4214(b)]
- C. The Permittee shall monitor and/or test fuel oil as necessary to show compliance with Conditions III(c)(2)(D) and (4)(C) in accordance with ASTM methods D-4294 or D-5453 or other method approved in advance by the Department. [20 DCMR 502.3 and 502.6]
- D. The Permittee shall conduct and allow the Department access to conduct tests of air pollution emissions from any source as requested. [20 DCMR 502.1]

#### 4. Record Keeping Requirements:

A. For each emergency generator or fire pump engine, 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 [20 DCMR 302.1(c)(2)(B), 20 DCMR 500.8, and 40 CFR 60.4214(b)]:

- i. The date, time, duration, and reason for each start-up of each emergency engine including the following specific information:
  - 1. If the unit is operating in non-emergency situation pursuant to Condition III(c)(2)(C)(ii), the specific purpose for each operation period must be recorded; and
  - <u>2.</u> If the unit is operated for emergency purposes, what classified the operation as emergency;
- ii. The total hours of operation for each month and the cumulative 12-month rolling period shall be calculated and recorded within 15 days of the end of each calendar month for the previous month and the 12-month period ending at the end of that month;
- iii. The total hours of operation for maintenance checks and readiness testing and non-emergency operation pursuant to Condition III(c)(2)(C) each month, recorded within 15 days of the end of each calendar month and totaled for each calendar year by January 15 of each year for the previous calendar year;
- iv. The total hours of operation each calendar year for non-emergency purposes pursuant to Condition III(c)(2)(C)(ii);
- v. Records of the maintenance performed on the unit [Note that these records must be sufficient to show that the Permittee is complying with the requirements of Condition III(c)(2)(E)];
- vi. Records of the results of any visible emissions monitoring performed;
- vii. Records of the occurrence and duration of each malfunction of operation;
- viii. Records of the actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation; and
- ix. Records of the quantity of fuel used in the engine/generator, recorded on a monthly basis by the 15th day of each month for the previous calendar month.

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- B. The Permittee shall maintain a copy of the emergency generator manufacturer's maintenance and operating recommendations at the facility or at an electronic location readily accessible from the facility. [20 DCMR 500.1]
- C. The Permittee shall comply with the requirements of Condition I(d)(2)(B)(ii) to ensure compliance with Condition III(c)(2)(D) of this permit.
- D. For each unit, the Permittee shall maintain a copy of the EPA Certificate of Conformity at the facility (or at an electronic location readily accessible from the facility) at all times. [20 DCMR 500.1 and 40 CFR 60.4214(a)(2)(iii)]
- d. <u>Emission Units: Non-NSPS CI-ICE Emergency Generators Sets and Fire Pumps:</u> Twenty (21) emergency generators and fire pumps not subject to the NSPS as listed below:

Equipment Location	Unit ID	Chapter 2 Permit No.†	<b>Emission Unit Description</b>	Generator Set/Engine Serial Numbers
Building 73- Generator room (south side of building)	EG-73-1		165 kWe Caterpillar generator set with 265 hp diesel engine (manufactured and installed circa 1970)	46B4947/ 66D23369
Building 94 - Outside (southwest corner of building)	EG-94-1		400 kWe Katolight generator set with 635 hp diesel engine (manufactured 11/2001 and installed 2004)	LM240643 77447/ L11344
Building 165 - outside (northeast of Building 169, adjacent to Brookley Ave)	EG-165-1		130 kWe Generac generator set with 198 hp diesel engine (manufactured 4/1996 and installed circa 1997)	2026502/ 76815
Building 398 - Mechanical room (inside)	EG-398-1		900 kWe Caterpillar generator set with 1,305 hp diesel engine (manufactured 5/18/1989 and installed 1991)	6NA01670/ 24Z02747
Building 398 - Fire pump room (inside)	EG-398-2		231 hp diesel engine Fire Pump #1 (manufactured 1988 and installed 1991)	Unknown/ 64Z07414
Building 398 - Fire pump room (inside) Building 398 -	EG-398-3 EG-398-4		231 hp diesel engine Fire Pump #2 (manufactured 1988 and installed 1991) 231 hp diesel engine Fire	Unknown/ 64Z07561  Unknown/

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Equipment Location	Unit ID	Chapter 2 Permit No. <sup>†</sup>	<b>Emission Unit Description</b>	Generator Set/Engine Serial Numbers
Fire pump room (inside)			Pump #3 (manufactured 1988 and installed 1991)	64Z07491
Building 408 - Emergency generator room (inside)	EG-408-1		1,100 kWe Caterpillar generator set with 1,847 hp diesel engine (manufactured June 21, 1989 and installed 1989)	STD00732/ 25Z01666
Building 408 - Emergency generator room (inside)	EG-408-2		1,100 kWe Caterpillar generator set with 1,847 hp diesel engine (manufactured June 31, 1989 and installed 1989)	5TD00733/ 25Z01682
Building 410/411 - Outside (East of building 411 and west of 410)	EG-410-1		One (1) 400 kWe Katolight generator set with 634 hp diesel engine (manufactured 1995 and installed circa 1996)	WAS02348 E-42836/ DD08VF168 370
Building B421 -	EG-B421-1		One (1) 125 kWe Kohler generator set with 190 hp diesel engine (manufactured 8/7/2004 and installed 1/20/2007)	2004423/ PE6068T383 720
Building 1304 - Outside (West of building)	EG-1304-1		One (1) 175 kWe Cummins generator set with 277 hp diesel engine (manufactured 12/6/1999 and installed 11/1/2001)	L990033510/ 45923408
Building 6000 - Powerhouse	EG-6000-1		2,000 kWe Cummins generator set with 2,920 hp diesel engine (manufactured May 14, 2005 and installed Fall 2006)	D050773510 / 33160048
Building 6000 - Powerhouse	EG-6000-3		2,000 kWe Cummins generator set with 2,920 hp diesel engine (manufactured May 5, 2005 and installed Fall 2006)	D050773509 / 33159990
Building 6000 - Powerhouse	EG-6000-4		2,000 kWe Cummins generator set with 2,920 hp diesel engine (manufactured	D050773512 / 33160098

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Equipment Location	Unit ID	Chapter 2 Permit No. <sup>†</sup>	Emission Unit Description	Generator Set/Engine Serial Numbers
			May 16, 2005 and installed Fall 2006)	
Building 6000A - Penthouse	EG-6000A-1		1,500 kWe Cummins generator set with 2,200 hp diesel engine (manufactured May 24, 2004 and installed circa 2005)	F040657054/ 33156681
Building 6000A - Penthouse	EG-6000A-2		1,500 kWe Cummins generator set with 2,200 hp diesel engine (manufactured May 26, 2004 and installed circa 2005)	F040657052/ 33156685
Building 6000A - Penthouse	EG-6000A-3		1,500 kWe Cummins generator set with 2,200 hp diesel engine (manufactured May 24, 2004 and installed circa 2005)	F040657053/ 33156684
Building 7400 - outside (east of building)	EG-7400-1	6632	1,000 kWe Cummins generator set with 1,490 hp diesel engine (generator set manufactured 2013 using refurbished model year 2002 engine and installed circa 2013)	L020451401 / 10429

#### 1. Emission Limitations:

A. Visible emissions shall not be emitted into the outdoor atmosphere from the units, 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 24-hour 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(d)(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 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. Each of the emergency generator sets and fire pumps shall be operated for fewer than 500 hours in any 12-consecutive-month period. If operation of 500 or more hours is desired, the Permittee shall submit an application to amend this permit to comply with the conditions 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(d)(2)(C), the emergency engines and fire pumps shall be operated only during emergencies as follows [20 DCMR 201]:
  - i. For engines associated with emergency generators, 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.); and
  - ii. For engines associated with fire pumps, any fire emergency.
- C. Each of the emergency generators and fire pumps 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 year as specified in Conditions III(d)(2)(C)(i) and (ii) below. Any such operation shall be considered as part of the 500 hours allowed under Condition III(d)(2)(A) above. [40 CFR 63.6640(f)]
  - i. The emergency generators and fire pumps 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 generators 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 operation shall be counted as part of the 100 hours per calendar year for maintenance and testing as provided in Condition III(d)(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;
  - <u>3.</u> All operations prohibited under Condition III(d)(2)(F) are also prohibited under this condition; and
  - 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 emergency generators and fire pumps shall fire only diesel fuel which contains a maximum sulfur content of 15 ppm (0.0015 percent by weight) and either a cetane index of 40 or a maximum aromatic content of 35 volume percent. [20 DCMR 201 and 20 DCMR 801.1]
- E. The emergency generators 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. [20DCMR 201]
- F. The emergency generator sets and fire pumps shall be operated and maintained in accordance with the manufacturer's emission-related written instructions or develop and implement a written maintenance plan consistent with industry standards for similar models if manufacturer instructions are unavailable. Any 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(d)(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 annually, 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 each engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate 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 each emergency engine start-up, as well as the number of hours of operation of each engine to ensure compliance with Conditions III(d)(2)(A), (B), (C), and (E) of this permit. [20 DCMR 500.2]
- B. The Permittee shall monitor and/or test for the sulfur content in fuel obtained for use in the engines, in accordance with Condition I(d)(2)(B)(ii) to ensure compliance with Condition III(d)(2)(D) of this permit. [20 DCMR 500.2, 502.3, and 502.6]
- C. In order to ensure compliance with Condition III(d)(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)]

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D. The Permittee shall conduct and allow the Department access to conduct tests of air pollution emissions from any source as requested. [20 DCMR 502.1]

### 4. Record Keeping Requirements:

- A. For each emergency generator or fire pump engine, 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) in accordance with the requirements specified in Condition I(c) [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 engine, including the following specific information:
    - 1. If the unit is operated in non-emergency situations pursuant to Condition III(d)(2)(C)(ii), the specific purpose for each operation period must be recorded; and
    - <u>2.</u> If the unit is operated for emergency purposes, what classified the operation as emergency.
  - ii. The total hours of operation for each month and the cumulative 12-month rolling period shall be calculated and recorded within 15 days of the end of each calendar month for the previous month and the 12-month period ending at the end of that month;
  - iii. The total hours of operation for maintenance checks and readiness testing and non-emergency operation pursuant to Condition III(d)(2)(C) each month, and totaled for each calendar year by January 15 of each year for the previous calendar year;
  - iv. The total hours of operation for non-emergency purposes each calendar year pursuant to Condition III(d)(2)(C)(ii), totaled by January 15 of each calendar year for the previous calendar year;
  - v. Records of the quantity of fuel used in the engine/generator, recorded on a monthly basis by the 15th day of each month for the previous calendar month;
  - vi. Records of the maintenance performed on each unit [Note that these records must be sufficient to show that the Permittee is complying with the requirements of Condition III(d)(2)(F)];
  - vii. Records of the results of any visible emissions monitoring performed;

viii. Records of the occurrence and duration of each malfunction of operation; and

- ix. Records of the actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunction process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- B. The Permittee shall maintain a copy of each emergency generator's manufacturer's maintenance and operating recommendations at the facility or at an electronic location readily accessible from the facility. If such documentation is unavailable, the Permittee shall maintain documentation of the written maintenance plan consistent with industry standards in accordance with which the unit is being maintained. [20 DCMR 500.1]
- C. The Permittee shall comply with the requirements of Condition I(d)(2)(B)(ii) to ensure compliance with Condition III(d)(2)(D) of this permit.
- e. <u>Emission Unit: NSPS CI-ICE Emergency Generator Set with Uncertified Engine:</u> The following emergency generator set was manufactured on or about November 5, 2007, but the associated engine is not labeled with a date of manufacture or other identification information that can be used to determine the model year. Also, no EPA Certificate of Conformity is available. Thus, this engine is being permitted as an uncertified model year 2007 engine.

Equipment Location	Unit ID	Chapter 2 Permit No.†	<b>Emission Unit Description</b>	GenSet / Engine Serial Numbers
Building 6126 - (south of building inside fence)	EG-6126-1	_	One (1) 20 kWe Generac generator set with 45 hp diesel engine (generator manufactured 11/5/2007 and installed circa 2008; engine model year unknown – treated as 2007)	2095523 / Unknown

The Chapter 2 permit numbers listed here are for reference only. The requirements of the Chapter 2 permits have been incorporated into this permit and the separate Chapter 2 permit documents are no longer maintained.

### 1. Emission Limitations:

A. Except as specified in Condition III(e)(1)(B), emissions from this unit shall not exceed those in the following table as measured according to the procedures set forth in 40 CFR 89, Subpart E for NMHC, NOx, and CO and 40 CFR 89.112(c) for PM [40 CFR 60.4204(b), 40 CFR 60.4201(a), and 40 CFR 89.112]

Pollutant Emission Limits (g/kWm-hr)				
NMHC + NO <sub>x</sub> CO PM				
7.5	5.5	0.60		

B. In lieu of documenting compliance with the requirements of Condition III(e)(1)(A), the Permittee may comply with the standards in the following table by the methods specified in Condition III(e)(3)(E) and (F) [40 CFR 60.4205(e), 40 CFR 60.4211(b)(5), and 40 CFR 60.4212(c)]

Pollutant Not-To-Exceed (NTE) <sup>‡</sup> Emission Limits				
(g/HP-hr)				
$NMHC + NO_x$ CO PM				
9.4	6.9	0.80		

The NTE Standard is derived by applying the multiplier 1.25 to the applicable emission standards of Table 1 of Subpart IIII of 40 CFR 60, rounded to the same number of decimal places as the standard pursuant to 40 CFR 60.4212(c).

C. Visible emissions shall not be emitted into the outdoor atmosphere from this generator, 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(e)(1)(C) as stated above.

- D. In addition to the requirements of Condition III(e)(1)(C), exhaust opacity, measured and calculated as set forth in 40 CFR 86, Subpart I, shall not exceed [40 CFR 60.4205 (a) and (e), 40 and 40 CFR 89.113]:
  - i. 20 percent during the acceleration mode;
  - ii. 15 percent during the lugging mode;

- iii. 40 percent during the peaks in either the acceleration or lugging modes. *Note that this condition is streamlined with the requirements of 20 DCMR 606.1*.
- E. 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]

### 2. Operational Limitations:

- A. The emergency generator shall be operated for fewer than 500 hours in any given 12 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 conditions of 20 DCMR 805 and shall obtain the Department's approval of such application prior to initiating such operation. [20 DCMR 201 and 20 DCMR 805.1(c)]
- B. Except as specified in Condition III(e)(2)(C), the emergency generator 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 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 Condition III(e)(2)(C)(i) and (ii) below. Any such operation shall be considered as part of the 500 hours allowed under Condition III((e)(2)(A) above. [40 CFR 60.4211(f)]
  - i. The emergency generator 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 60.4211(f)(2)(i) and DCMR 201]; and
  - ii. The emergency generator may be operated for up fifty (50) hours per calendar year in non-emergency situations, subject to the following conditions [40 CFR 60.4211(f)(3) 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(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;

- <u>3</u>. All operations prohibited under Condition III(f) are also prohibited under this condition; and
- 4. All operations of the emergency generator resulting from a deviation in voltage or frequency from the electric provider to the premises such that the equipment being supported cannot be safely or effectively operated shall be considered non-emergency operation and counted as part of this 50 hour per calendar year allowance.
- D. The emergency generator shall fire only diesel fuel that contains a maximum sulfur content of 15 ppm (0.0015 percent by weight) and either a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent. [40 CFR 60.4207(b)]
- E. The emergency generator shall be operated and maintained in accordance with the manufacturer's emission-related written instructions for the emergency generator and its control device, if applicable. [40 CFR 60.4211(a)(1) and DCMR 201]
- F. The emergency generator 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]
- G. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the units 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 201]

#### 3. Monitoring and Testing Requirements:

- A. The Permittee shall monitor the date, time, duration, and reason for each emergency generator startup to ensure compliance with Conditions III(e)(2)(A), (B), (C), and (F). [20 DCMR 500.2]
- B. In order to ensure compliance with Condition III(E)(2)(A), the Permittee shall monitor the total hours of operation each month with the use of properly functioning, non-resettable hour metering device. [40 CFR 60.4209(a) and 40 CFR 60.4214(b)]

- C. The Permittee shall monitor and/or test fuel oil as necessary to show compliance with Conditions III(e)(2)(D) and III(e)(5)(C) in accordance with appropriate ASTM methods specified in 20 DCMR 502.6 or approved by the Department pursuant to 20 DCMR 502.3. [20 DCMR 502.3 and 502.6]
- D. The Permittee shall conduct and allow the Department access to conduct tests of air pollution emissions from any source as requested. [20 DCMR 502.1]
- E. The Permittee shall perform an initial performance test to determine compliance with Condition III(e)(1)(B) of this permit within 180 days of issuance of this permit.
- F. The testing required pursuant to Condition III(e)(3)(E) shall be performed in accordance with the following procedures [40 CFR 60.8 and 40 CFR 60.4211(b)(5), 40 CFR 60.4212(a), 40 CFR 1039, subpart F] and the requirements of Condition III(e)(5):
  - i. The performance test must be conducted according to the in-use testing procedures in 40 CFR 1039, Subpart F, including the following [40 CFR 60.4212(a), 40 CFR 1039.501(a), and 40 CFR 1065]:
    - 1. Measure the emissions of all the exhaust constituents subject to emission standards (see Condition III(e)(1)(B)) as specified in 40 CFR 1065; and
    - <u>2</u>. Follow the procedures for field testing as specified in 40 CFR 1065, Subpart J.
  - ii. The performance tests shall not be conducted during periods of startup, shutdown, or malfunction as specified in 40 CFR 60.8(c).

### 4. Notification and Reporting Requirements:

- A. At least 30 days in advance of the proposed date of the testing required pursuant to Conditions III(e)(3)(E) and (F), an original test protocol shall be submitted to the Department for review at the address specified in Condition III(e)(4)(F)(i). The testing shall be 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 results of the testing performed pursuant to Conditions III(e)(3)(E) and (F) shall be submitted to the Department within 60 days after completion of the

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testing program.

- D. The final report of the results required pursuant to Condition III(e)(4)(C) 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 Permittee 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.
- E. 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 Permittee shall propose corrective action(s). Failure to demonstrate compliance through the test may result in enforcement action.
- F. The notifications and reports required under Condition III(e)(4) shall be submitted to the Department as follows:
  - i. Signed originals shall be submitted to the Department at the following address:

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

and;

ii. Electronic copies shall be submitted to the Department by email at <a href="mailto:air.quality@dc.gov">air.quality@dc.gov</a>.

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# 5. 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 three (3) years from the date the information is obtained [20 DCMR 500.8 and 40 CFR 60.7]:
  - 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(e)(2)(C)(ii), the specific purpose for each operation period must be recorded; and
    - 2. If the unit is operated for emergency purposes, what classified the operation as emergency;
  - ii. The total hours of operation for each month and the cumulative 12-month rolling period shall be calculated and recorded within 15 days of the end of each calendar month for the previous month and the 12-month period ending at the end of that month;
  - iii. The total hours of operation for maintenance checks and readiness and nonemergency operation testing pursuant to Condition III(c) each month, and totaled for each calendar year by January 15 of each year for the previous calendar year;
  - iv. The total hours of operation each calendar year for non-emergency purposes pursuant to Condition III(e)(2)(C)(ii).
  - v. Records of the maintenance performed on the unit [40 CFR 60.4214(a)(2)(ii)] [Note that these records must be sufficient such that the Permittee is complying with the requirements of Condition III(e)(2)(E);
  - vi. Records of the results of any visible emissions monitoring performed;
  - vii. Records of the occurrence and duration of each malfunction of operation;
  - viii. Records of the actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunction process and air pollution control and monitoring equipment to its normal or usual manner of operation; and

- ix. Records of the quantity of fuel used in the unit, recorded on a monthly basis and summed for each calendar year.
- B. The Permittee shall maintain a copy of the emergency generator's manufacturer's maintenance and operating recommendations at the facility or at an electronic location readily accessible from the facility. [20 DCMR 501]
- C. The Permittee shall comply with the requirements of Condition I(d)(2)(B)(ii) to ensure compliance with Condition III(e)(2)(D) of this permit.
- D. The Permittee shall maintain a copy of the results of the testing performed pursuant to Conditions III(e)(3)(E) and (F) at the facility (or at an electronic location readily accessible from the facility) at all times.
- f. <u>Emission Units: NSPS Spark Ignition Internal Combustion Engine (SI-ICE) Emergency Generator Set:</u>

One (1) emergency standby generator set powered by a natural gas engine subject to the NSPS (40 CFR 60, Subpart JJJJ) as follows:

Equipment Location	Unit ID	Chapter 2 Permit No. <sup>†</sup>	<b>Emission Unit Description</b>	GenSet / Engine Serial Number
Building 8034	EG-8034-1	-	60 kWe generator set with 98 hp natural gas engine (manufactured August 2010 and installed October 2010)	H100148605

The Chapter 2 permit numbers listed here are for reference only. The requirements of the Chapter 2 permits have been incorporated into this permit and the separate Chapter 2 permit documents are no longer maintained.

#### 1. Emission Limitations:

A. Emissions from this unit shall not exceed those in the following table, as measured according to the procedures set forth in 40 CFR 60.4244 [40 CFR 60.4233(d), 40 CFR 60.4244, and Subpart JJJJ, Table 1]:

Pollutant Emission Limits (g/hp-hr)			
NO <sub>x</sub> CO			
10	387		

B. Visible emissions shall not be emitted into the outdoor atmosphere from these generators, 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)

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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(f)(1)(B) as stated above.

C. 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]

### 2. Operational Limitations:

- A. The emergency generator shall be operated 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 conditions of 20 DCMR 805 and shall obtain the Department's approval of such application prior to initiating such operation. [20 DCMR 201 and 20 DCMR 805.1(c)]
- B. With the exceptions specified in Condition III(f)(2)(C) below, the emergency generator 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 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(f)(2)(C)(i) and (ii) below. Any such operation shall be considered as part of the 500 hours allowed under Condition III(f)(2)(A) above. [40 CFR 60.4243(d)]
  - i. The emergency generator 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 60.4243(d)(2)(i) and DCMR 201]; and

- ii. The emergency generator may be operated for up to fifty (50) hours per calendar year in non-emergency situations, subject to the following conditions [40 CFR 60.4243(d)(3) and 20 DCMR 201]:
  - 1. Any such operation shall be counted as part of the 100 hours per calendar year for maintenance and testing as provided in Condition III(f)(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(f)(2)(F) are also prohibited under this condition; and
  - 4. All operations resulting from a deviation in voltage or frequency from the electric provider to the premises such that the equipment being supported cannot be safely or effectively operated shall be considered non-emergency operation and counted as part of this 50 hour per calendar year allowance.
- D. The emergency generator shall fire only natural gas. [20 DCMR 201]
- E. The emergency generator shall be operated and maintained in accordance with the recommendations of the equipment manufacturer. [20 DCMR 201 and 40 CFR 60.4243(a)]
- F. The emergency generator 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]
- G. At all times, including periods of startup, shutdown, and malfunction, the owner shall, to the extent practicable, maintain and operate the units 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 201]

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### 3. Monitoring and Testing Requirements:

- A. The Permittee shall monitor the date, time, duration, and reason for the each emergency generator startup to ensure compliance with Conditions III(f)(2)(A), (B), (C) and (F). [20 DCMR 500.2 and 20 DCMR 302.1(c)(1)(B) and (C)]
- B. In order to ensure compliance with Condition III(f)(2)(A), the Permittee shall monitor the total hours of operation each month with the use of properly functioning, non-resettable hour metering device. [40 CFR 60.4237 and 60.4245(b)]
- C. The Permittee shall conduct and allow the Department access to conduct tests of air pollution emissions from any source as requested. [20 DCMR 502.1]

# 4. <u>Record Keeping Requirements:</u>

- 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) in accordance with the requirements specified in Condition I(c). [20 DCMR 301.2(c)(2)(B) and 20 DCMR 500.8]
  - i. The date, time, duration, and reason for each start-up of the emergency generator including the following information;
    - 1. If the unit is operated in non-emergency situations pursuant to Condition III(f)(2)(C), the specific purpose for each operation period must be recorded; and
    - <u>2.</u> If the unit is operated for emergency purposes, what classified the operation as emergency.
  - ii. The total hours of operation for each month and the cumulative 12-month rolling period shall be calculated and recorded within 15 days of the end of each calendar month for the previous month and the 12-month period ending at the end of that month;
  - iii. The total hours of operation for maintenance checks and readiness testing and non-emergency operation pursuant to Condition III(f)(2)(C) each month, and totaled for each calendar year by January 15 of each year for the previous calendar year;
  - iv. The total hours of operation each calendar year for non-emergency purposes pursuant to Condition III(f)(2)(C)(ii);

- v. Records of the quantity of fuel used in the engine/generator, recorded on a monthly basis by the 15th day of each month for the previous calendar month;
- vi. Records of the maintenance performed on the unit [Note that these records must be sufficient to show that the Permittee is complying with the requirements of Condition III(f)(2)(E)];
- vii. Records of the results of any visible emissions monitoring performed;
- viii. Records of the occurrence and duration of each malfunction of operation; and
- ix. Records of the actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- B. The Permittee shall maintain a copy of the emergency generator's manufacturer's maintenance and operating recommendations at the facility or at an electronic location readily accessible from the facility. [20 DCMR 501]
- C. The Permittee shall maintain a copy of the EPA Certificate of Conformity for the engine at the facility (or at an electronic location readily accessible from the facility) at all times. [40 CFR 60.4245(a)(3)]
- g. <u>Emission Unit: Non-NSPS SI-ICE Emergency Generator Set:</u>
  One (1) emergency standby generator set powered by a natural gas engine not subject to any NSPS as follows:

Equipment Location	Unit ID	Chapter 2 Permit No.†	<b>Emission Unit Description</b>	GenSet / Engine Serial Number
Building 91	EG-91-1	-	60 kWe generator set with 105 hp natural gas engine (manufactured January 2007 and installed March 2009)	2137357/ 5P7211869

The Chapter 2 permit numbers listed here are for reference only. The requirements of the Chapter 2 permits have been incorporated into this permit and the separate Chapter 2 permit documents are no longer maintained.

#### 1. Emission Limitations:

A. Visible emissions shall not be emitted into the outdoor atmosphere from the generator, 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 (24) hour

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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(g)(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 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 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 conditions 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(g)(2)(C), the emergency generator 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 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(g)(2)(C)(i) and (ii) below. Any such operation shall be considered as part of the 500 hours allowed under Condition III(g)(2)(A) above. [40 CFR 63.6640(f)]
  - i. The emergency generator 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 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(g)(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(g)(2)(E) are also prohibited under this condition; and
  - 4. All operations resulting from a deviation in voltage or frequency from the electric provider to the premises such that the equipment being supported cannot be safely or effectively operated shall be considered non-emergency operation and counted as part of this 50 hour per calendar year allowance.
- D. The emergency generator shall fire only natural gas. [20 DCMR 201]
- E. The emergency generator 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. [20DCMR 201]
- F. The emergency generator 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(g)(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 annually, 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 spark plugs 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 each engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed thirty (30) minutes. [40 CFR 63.6625(h)]
- I. At all times, including periods of startup, shutdown, and malfunction, the owner 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 each emergency generator start-up to ensure compliance with Conditions III(g)(2)(A), (B), (C), and (E) of this permit. [20 DCMR 500.2]
- B. In order to ensure compliance with Condition III(g)(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)]

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# 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) in accordance with the requirements specified in Condition I(c) [20 DCMR 302.1(c)(2)(B), 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(c)(2)(C)(ii), the specific purpose for each operation period must be recorded; and
    - <u>2.</u> If the unit is operated for emergency purposes, what classified the operation as emergency.
  - ii. The total hours of operation for each month and the cumulative 12-month rolling period shall be calculated and recorded within 15 days of the end of each calendar month for the previous month and the 12-month period ending at the end of that month;
  - iii. The total hours of operation for maintenance checks and readiness testing and non-emergency operation pursuant to Condition III(g)(2)(C) each month, and totaled for each calendar year by January 15 of each year for the previous calendar year;
  - iv. The total hours of operation each calendar year for non-emergency purposes pursuant to Condition III(g)(2)(B)(ii), totaled by January 15 of each calendar year for the previous calendar year;
  - v. Records of the quantity of fuel used in the engine/generator, recorded on a monthly basis by the 15th day of each month for the previous calendar month;
  - vi. Records of the maintenance performed on each unit [Note that these records must be sufficient to show that the Permittee is complying with the requirements of Condition III(g)(2)(F)];
  - vii. Records of the results of any visible emissions monitoring performed;
  - viii. Records of the occurrence and duration of each malfunction of operation; and

- ix. Records of the actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunction process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- B. The Permittee shall maintain a copy of the emergency generator's manufacturer's maintenance and operating recommendations at the facility or at an electronic location readily accessible from the facility. If such documentation is unavailable, the Permittee shall maintain documentation of the written maintenance plan consistent with industry standards in accordance with which the unit is being maintained. [20 DCMR 500.2]
- h. Emission Units: Tanks subject to Stage I (20 DCMR 704) vapor recovery requirements: The six (6) gasoline storage tanks and one (1) E-85 storage tank listed in the table below shall comply with the following requirements:

Emission Unit ID	Emission Unit Location	Description
TK-90-1	Building B90 – by the water (north of building 2482)	One (1) 6,000 gallon gasoline underground storage tank (UST) for boat refueling
TK-365-1	Building 365 - Adjacent to building	One (1) 10,000 gallon gasoline UST for government vehicle refueling
TK-365-2	Building 365 - Adjacent to building	One (1) 10,000 gallon E-85 UST for government vehicle refueling
TK-1311-1	Building 1311 - west of building	12,000 gallon gasoline UST for vehicle refueling
TK-1311-2	Building 1311 - west of building	12,000 gallon gasoline UST for vehicle refueling
TK-1311-3	Building 1311 - west of building	12,000 gallon gasoline UST for vehicle refueling
TK-1311-4	Building 1311 - west of building	12,000 gallon gasoline UST for vehicle refueling

### 1. Operational Limits:

- A. The Permittee must equip the storage tanks with a Stage I Vapor Recovery System (VRS) which shall remain operational whenever gasoline, or E-85 is being transferred into the tank [20 DCMR 704].
- B. The transfer of gasoline or E-85 from the delivery vessel into the stationary storage container shall occur only if the container is equipped with a submerged fill pipe and the displaced vapors from the storage container are processed by a system that prevents release to the atmosphere of no less than ninety (90) percent by weight of organic compounds in the vapor displaced from the stationary

container location. Submerged fill pipes shall comply with Conditions III(h)(1)(B)(i), (ii), or (iii), as applicable. The applicable distances in condition III(h)(1)(B)(i) or III(h)(1)(B)(ii) shall be measured from the point in the opening of the submerged fill pipe that is the greatest distance from the bottom of the storage tank. [20 DCMR 704.1, 20 DCMR 1408.1, and 40 CFR 63.11117(b)]

- i. Submerged fill pipes installed on or before November 9, 2006, must be no more than twelve (12) inches from the bottom of the tank.
- ii. Submerged fill pipes installed after November 9, 2006, must be no more than six (6) inches from the bottom of the tank.
- iii. Submerged fill pipes not meeting the specifications of conditions III(h)(1)(B)(i) or III(h)(1)(B)(ii) of this permit are allowed if the Permittee can demonstrate that the liquid level in the tank is always above the entire opening of the fill pipe.
- C. The vapor recovery portion of the Stage I VRS shall include either or both of the following [20 DCMR 704.2]:
  - i. A vapor return line from the storage container to the delivery vessel and a system that will ensure that the vapor return line is connected before gasoline, biodiesel, or E-85 can be transferred into the container; or
  - ii. A refrigeration-condensation system or equivalent designed to recover no less than ninety (90) percent by weight of the organic compounds in the displaced vapor.
- D. If a vapor-tight return system is used to meet the requirements of Condition (III)(h)(1)(A), the system shall be constructed as to be adapted to retrofit with an absorption system, refrigeration-condensation system, or equivalent vapor removal system. [20 DCMR 704.3]
- E. The operation or maintenance of any delivery vessel, or of any part of any liquid delivery system, or vapor collection or recovery system used or designed to be used in connection with the loading or unloading of the delivery vessel, shall be performed in a manner that is vapor-tight or in a manner so that there is no avoidable visible liquid leakage or liquid spillage. [20 DCMR 704.6]
- F. The tanks shall only be filled with the use of delivery vessels with posted certificates showing that the vessel passed a leak test within the past year in accordance with 20 DCMR 704.4(b) and (c). [20 DCMR 704.4 (f)]

- G. The gasoline throughput through TK-90-1 shall be maintained below 10,000 gallons every calendar month. [20 DCMR 201] *Note that this limit allows this unit to avoid applicability of Stage II requirements specified in Condition III(i) of this permit.*
- H. The Permittee shall not handle or allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following [20 DCMR 1408.1, 40 CFR 63.11116(a) and (for all tanks subject to this section except TK-90-1) 40 CFR 63.11117(a)]
  - i. Minimize gasoline spills;
  - ii. Clean up spills as expeditiously as practicable;
  - iii. Cover all open gasoline containers and all gasoline storage fill-pipes with a gasketed seal when not in use; and
  - iv. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

#### 2. Monitoring and Testing Requirements:

- A. Prior to filling of the tank by a delivery vessel, the Permittee shall take affirmative action to ensure that the delivery vessel has a clear an unequivocal certificate indicating that it has been leak tested within the past year and that the leak test showed compliance with the standards specified on Condition III(h)(1)(F). [20 DCMR 704.4(f)]
- B. The Permittee shall monitor operation of the equipment and activities at the facility to ensure compliance with Conditions III(h)(1)(E) and (H).
- C. The Permittee shall monitor gasoline throughput on a monthly basis and otherwise as necessary to ensure compliance with Condition III(h)(1)(G).

#### 3. Record Keeping Requirements:

A. The Permittee shall maintain copies of the manufacture's specifications and design drawing for the tank and VRS to document compliance with Conditions III(h)(1)(A) through (D).

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- B. The Permittee shall maintain records of any leak identified pursuant to the monitoring required by Condition III(h)(2)(B) and the actions taken to correct the identified problem.
- C. The Permittee shall maintain records of each delivery of fuel and documentation that each delivery vehicle was checked to ensure compliance with Condition III(h)(1)(F). The person checking to ensure that an appropriate certificate is posted on the delivery vehicle pursuant to Condition III(h)(2)(A) shall initial and date the record of this check.
- D. The Permittee shall maintain a record of the monthly throughput of the gasoline and E-85 dispensers and must make these records available within 24 hours of a request by the Department or EPA. [20 DCMR 500.1, 20 DCMR 1408.1, 40 CFR 63.11116(b) (for TK-90-1) and 40 CFR 63.11117(d) (for all other tanks covered by this section)]

# 4. Reporting Requirements

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

i. Emission Units: Tanks subject to Stage II (20 DCMR 705) vapor recovery requirements: The Permittee shall ensure that a Stage II Vapor Recovery System on the five (5) gasoline storage tanks and one (1) E-85 storage tank listed in the table below remains operational and complies with the following requirements for all such tanks and vapor recovery systems [20 DCMR 705]:

Emission Unit ID	Emission Unit Location	Description		
TK-365-1	Building 365 - Adjacent to building	One (1) 10,000 gallon gasoline UST for government vehicle refueling		
TK-365-2	Building 365 - Adjacent to building	One (1) 10,000 gallon E-85 UST for government vehicle refueling <sup>3</sup>		
TK-1311-1	Building 1311 - west of building	12,000 gallon gasoline UST for vehicle refueling		

 $<sup>^3</sup>$  At the time of permitting, TK-365-2 does not have Stage II vapor recovery installed as required by 20 DCMR 705. The Permittee shall comply with the compliance plan in Condition VI of this permit for this unit on the schedule specified, unless 20 DCMR 705 is revised before the deadline specified in the compliance plan, in which case the revised requirements of 20 DCMR 705 will supersede the requirements of this section for TK-365-2.

TK-1311-2	Building 1311 - west of building	12,000 gallon gasoline UST for vehicle refueling
TK-1311-3	Building 1311 - west of building	12,000 gallon gasoline UST for vehicle refueling
TK-1311-4	Building 1311 - west of building	12,000 gallon gasoline UST for vehicle refueling

#### 1. Emission Limitations:

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]\*

# 2. Operational Limits:

- A. The transfer of gasoline and E-85 to any vehicular fuel tank from any stationary storage container shall be prohibited unless the transfer is made through a fill nozzle designed, operated, and maintained as follows [20 DCMR 705.1]:
  - i. To prevent the discharge of the fuel vapors to the atmosphere from either the vehicle filler neck or the fill nozzle;
  - ii. To direct the displaced vapor from the vehicular fuel tank to either of the following
    - 1. A system, utilizing a process other than vacuum assist, wherein at least ninety percent (90%) by weight of the organic compounds in the displaced vapors are removed, recovered, or destroyed; or
    - 2. A system, utilizing a vacuum assist process, wherein at least ninety-six percent (96%) by weight of the organic compounds in the displaced vapors are removed, recovered or destroyed; and
  - iii. To prevent vehicular fuel tank overfills or spillage.
- B. Permittee must equip the fuel dispensing unit with a vapor balance system meeting the following specifications [20 DCMR 705.6]:
  - i. A vapor-tight vapor return hose to conduct the vapors displaced from the vehicular fuel tank to the fuel dispensing facility's fuel storage tank(s);
  - ii. A vapor-tight seal to prevent the escape of fuel vapors into the atmosphere from the interface between the fill nozzle and the filler neck of the vehicular fuel tank:

- iii. A fill nozzle with a built-in no-seal no-flow feature designed to prevent the discharge of fuel from the nozzle unless the seal described in paragraph (ii) of this subsection is engaged;
- iv. A fill nozzle with a built-in feature, designed to automatically shut off the flow of fuel when the pressure in the vehicular fuel tank exceeds ten (10 in.) inches of water gauge;
- v. A vapor return hose equipped with a device that will automatically shut off the flow of fuel through the fill nozzle when fuel circulates back from the fill nozzle through the vapor hose to the facility's fuel storage tank(s);
- vi. A vapor return hose no longer than nine feet (9 ft.) in length unless the hose is attached to a device designed to keep the hose out of the way of vehicles (when the nozzle is not in use) and to drain the hose of any collected or condensed fuel; and
- vii. A fuel dispensing system equipped with a device designed to prevent the dispensing of fuel at any rate greater than eight (8) gallons per minute.
- C. The fill nozzle system shall be maintained in good repair and proper operating practices including, but not limited to, the following practices shall be followed [20 DCMR 705.7]:
  - i. Draining the vapor return hose as often as is necessary, but at least once each operating day, of any collected or condensed fuel;
  - ii. Waiting as long as is necessary, but at least three (3) seconds after the shut off of the fuel, before disconnecting the nozzle from the fill neck, in order to balance the pressure between the vehicular fuel tank and the facility's fuel storage tank(s); and
  - iii. After each fuel delivery, placing the vapor return hose on an area where vehicles will not ride over the vapor return hose.
- D. The transfer of fuel to any vehicular fuel tank from any stationary storage tank shall be prohibited, unless the transfer is made through a fill nozzle designed to automatically shut off the transfer of fuel when the vehicular fuel tank is full or nearly full. [20 DCMR 705.8]
- E. Any additional transfer of fuel to any vehicular fuel tank from a stationary storage tank after the dispensing system has automatically shut off the transfer of fuel by virtue of the vehicular fuel tank being full or nearly full shall be prohibited. [20 DCMR 705.9]

- F. The Permittee shall take the actions necessary to ensure that all parts of the system used at the facility for compliance with the section are maintained in good repair, and to ensure that any person whether attendant, customer, or other, who uses the facility, does so in accordance with proper operating practices and otherwise in compliance with the requirements of this section. [20 DCMR 705.10]
- G. The transfer of fuel to any vehicular fuel tank from any stationary storage tank where a system for the control of fuel vapors resulting from motor vehicle fueling operations is required shall be prohibited unless the operator posts conspicuously the operating instructions and warnings for the system in the fuel dispensing area. The Permittee shall [20 DCMR 705.12]:
  - i. Clearly describe how to fuel vehicles correctly with vapor recovery nozzles utilized at the station;
  - ii. Include a prominent display of the telephone number of the service station Permittee for making complaints; and
  - iii. Include warnings that:
    - 1. Repeated attempts to continue dispensing, after the system has indicated that the vehicle fuel tank is full, may result in spillage or recirculation of fuel; and
    - 2. Breathing fuel vapors is hazardous to health.

#### 3. Monitoring and Testing Requirements:

- A. The Permittee shall monitor operation of the equipment to ensure compliance with Condition III(i)(2)(A).
- B. The Permittee shall conduct Stage II vapor recovery testing at least once every twelve (12) months to include all of the following, as applicable to the equipment [20 DCMR 502]:
  - i. A leak test in accordance with the California Air Resources Board (CARB) Vapor Recovery Test Procedure TP-201.3, as amended;
  - ii. An air-to-liquid volume ratio test in accordance with CARB's Vapor Recovery Test Procedure TP-201.5, as amended;
  - iii. A dynamic pressure performance test in accordance with CARB's Vapor Recovery Test Procedure TP-201.4, as amended;

- iv. A vapor return line vacuum integrity test for the Healy Model 400 ORVR System in accordance with CARB Executive Order G-70-186, Exhibit 4 (October 26, 1998), or superseding order;
- v. A vapor return line vacuum integrity test for the Healy Model 600 System in accordance with CARB Executive Order G-70-165 Exhibit 4 (April 20, 1995), or superseding order;
- vi. A leak rate and cracking pressure test in accordance with most recent version of CARB's TP-201.1E, (October 8, 2003)as amended; and
- vii. A tie tank test in accordance with most recent version of CARB's TP-201.3C, (July 26, 2012)as amended.

### 4. Record Keeping and Reporting Requirements:

- A. The Permittee shall maintain copies of the manufacture's specifications and design drawings for the vapor recovery system to document compliance with Conditions III(i)(2)(A) through (G).
- B. The Permittee shall maintain records of any leak identified pursuant to the monitoring required of Condition III(i)(3)(A) and (B) and the actions taken to correct the identified problem.
- C. The Permittee shall maintain records of the results of any test performed on the fuel dispenser unit.
- D. The Permittee shall maintain a record of the monthly throughput of the fuel dispenser.
- E. The Permittee shall submit annually the results of Stage II testing required pursuant to Condition III(i)(3)(B) with the annual certification report required pursuant to Condition I(d)(2) of this permit.

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j. <u>Emission Units: Non-Automotive Paint Spray Booths at Building 399 (PB-399-1 and PB-399-2) and Building 4472 (PB-4472-1):</u>

The three (3) non-automotive paint spray booth listed in the table below shall comply with the following requirements:

Emission Unit ID	Stack ID	Emission Unit Location	Ch. 2 Permit No. †	Description
PB-399-1	-	Building 399 - 1st floor adjacent to wood working shop	6543	One (1) paint booth room for wood and metal items
PB-399-2	-	Building 399 - 2nd floor	-	One (1) enclosed paint booth room for metal items
PB-4472-1	-	Building 4472 - 1st floor adjacent to wood working shop	-	One (1) paint booth room for wood and personal craft items

The Chapter 2 permit numbers listed here are for reference only. The requirements of the Chapter 2 permits have been incorporated into this permit and the separate Chapter 2 permit documents are no longer maintained.

#### 1. Emission Limitations:

- A. The Permittee shall not discharge into the atmosphere more than fifteen (15) pounds of VOC emissions in any one (1) day, nor more than three pounds (3 lb.) in any one (1) hour, from all painting operations that occur in the equipment covered by Condition III(j) and any other combination of articles, machines, units, equipment, or other contrivances at a 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 107 and 606]

# 2. Operational Limitations:

- A. No chemical strippers containing methylene chloride (MeCl) shall be used for paint stripping at the facility. [20 DCMR 201]
- B. Adhesives, sealants, adhesive primers, or sealant primers shall not be used in the equipment unless they comply with the requirements of Condition II(n). [20 DCMR 743 through 749]

- C. Mobile equipment, as defined in 20 DCMR 799, shall not be coated in these paint booths. [20 DCMR 201]
- D. The exhaust stacks shall be designed with sufficient height and configuration so as to assure compliance with Condition III(j)(1)(B). [20 DCMR 201]
- E. The coatings applied shall be by one or more of the following methods [20 DCMR 201]:
  - 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); or
  - iv. High volume low pressure (HVLP) spray guns.
- F. If 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 or a combination 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 cleaning solvent into a paint waste container that is kept closed when not in use;
    - <u>3</u>. 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.
- 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 ninety eight-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.
- 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 non-absorbent, non-leaking containers;
  - ii. Close all repairing and refinishing 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 201]
- J. The Permittee shall use less than 3,842 liters (1,015 gallons) of coatings (as applied) for coating metal furniture per calendar year at the facility (all metal furniture coating occurring at the facility, not just in this booth). [20 DCMR 201 and 40 CFR 60.310(c)]

#### 3. Monitoring and Testing:

A. The Permittee shall monitor the contents of any chemical strippers used at the facility to ensure that they do not contain MeCl.

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B. The Permittee shall track the quantity and VOC content of all paints and coatings used at the facility, as applied, to ensure compliance with Condition III(j)(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  $8.345 \times 10^{-3}$  (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<sub>v</sub> = Mass of total volatiles, in grams;

W<sub>w</sub> = Mass of water, in grams;

W<sub>ec</sub> = Mass of exempt compounds, in grams;

V = Volume of coating, in liters; V<sub>w</sub> = Volume of water, in liters; and

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

- C. The Permittee shall maintain an awareness of the area to ensure that the odor and nuisance air pollutant requirements of Condition III(j)(1)(B) are met.
- D. The Permittee shall monitor the emission point from the spray booth to ensure that the requirements of Condition III(j)(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(j)(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(j)(2)(G)(i) and (ii).

- G. The Permittee shall monitor the maintenance and operational status of the spray booth and the activities performed in the spray booth and at the facility to ensure compliance with the requirements of Conditions III(j)(2)(D), (E), (G), and (H).
- H. The Permittee shall monitor the total quantity of coatings, as applied, to metal furniture at the facility to ensure compliance with Condition III(j)(2)(J). As an alternative to monitoring coatings, as applied, to metal furniture specifically, the Permittee may monitor total quantities of coatings used at the facility to show that total quantities used do not exceed the limit in Condition III(j)(2)(J).

# 4. Record Keeping Requirements:

The Permittee shall maintain the following records for not less than five (5) years from the date of each record. [20 DCMR 302.1(c)(2)(B) and 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(j)(2)(A).
- B. The Permittee shall maintain records of the quantity, type, and VOC content of all paints and refinishing coatings used at the facility, as applied. The quantities of each coating shall be updated daily, and summed monthly. Additionally one of the following options shall be implemented:
  - i. If, in order to comply with Condition III(j)(2)(J), per Condition III(j)(3)(H), the Permittee monitors the quantity of coatings applied to metal furniture separately, this information shall also be recorded monthly and a calendar year sum shall be determined each January for the previous calendar year and recorded, or
  - ii. If, in order to comply with Condition III(j)(2)(J), per Condition III(j)(3)(H), the Permittee monitors total quantities of coatings used at the facility, the quantity of all coatings combined used shall be summed each January for the previous calendar year and recorded.
- C. Based on the monitoring and calculations required under Condition III(j)(3)(B) and the records kept under Condition III(j)(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(j)(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(j)(2)(F)(i).

- E. The Permittee shall maintain records of the specifications and replacement dates of spray booth filters to document compliance with Condition III(j)(2)(G).
- F. The Permittee shall maintain records of all maintenance performed on the spray booths.
- G. The Permittee shall maintain records of any deviations from the requirements of Conditions III(j) of this Permit.
- k. Emission Units: Automotive Paint Spray Booths at Building 411 (PB-411-1 and PB-411-2) and Building 362 (PB-362-1):

Each of the three (3) automotive paint spray booths listed in the table below shall comply with the following requirements:

Emission Unit ID	Emission Unit Location	Description
PB-411-1	Building 411 - Room 66A - Curtained paint booth	One (1) paint booth room for vehicle priming and preparation
PB-411-2	Building 411 - Room 66A - Enclosed paint booth	One (1) enclosed paint booth room for vehicle painting
PB-362-1	Building 362 - 1st floor	One (1) enclosed paint booth room for vehicle painting

# 1. General Automotive Paint Booth Conditions:

- A. If an automotive refinishing facility is found to be in violation of a provision of 20 DCMR Chapters 1-15, the Department may require the installation of additional emission controls or curtailment of operations until compliance is demonstrated. [20 DCMR 718.18] Installation of such a control device will be subject to the permitting requirements of 20 DCMR 200.1 and this permit must be revised to incorporate requirements for the proper operation of such equipment as well as the testing methods of 20 DCMR 718.35 and the record keeping requirements of 20 DCMR 718.25.
- B. Exemptions: Except Conditions III(k)(2)(H) and (I), the requirements of Condition III(k) do not apply to the following three materials:
  - i. A nonrefillable aerosol coating product;
  - ii. An automotive coating that is sold, supplied, or offered for sale in one half (0.5) fluid ounce or smaller containers intended to be used by the general public for automotive touch-up or repair for small surface imperfections; and
  - iii. A locally prepared mix of solvent and some amount of film forming solids

solely used to blend in spot repairs made to a discrete body panel, except that the application of cleaning solvent to a spot repair is not exempted.

#### 2. Emission Limitations:

- A. No chemical strippers containing methylene chloride (MeCl) shall be used for paint stripping at the facility. [20 DCMR 201.1]
- B. The Permittee shall not use or apply to a motor vehicle, mobile equipment, or associated parts and components, an automotive coating with a VOC regulatory content calculated in accordance with Condition III(k)(2)(D)(i) of this permit that exceeds the VOC content requirements of Table I below. [20 DCMR 718.3]

Table I. Allowable VOC Content in Automotive Coatings for Motor Vehicle and Mobile Equipment Non-Assembly Line Refinishing and Recoating

Cooting Catagory	VOC Regulatory Limit As Applied $^\epsilon$		
Coating Category	(Pounds per gallon)	(Grams per liter)	
Adhesion promoter	4.5	540	
Automotive pretreatment coating	5.5	660	
Automotive primer	2.1	250	
Clear coating	2.1	250	
Color coating, including metallic/iridescent color coating	3.5	420	
Multicolor coating	5.7	680	
Other automotive coating type	2.1	250	
Single-stage coating, including single- stage metallic/iridescent coating	2.8	340	
Temporary protective coating	0.50	60	
Truck bed liner coating	1.7	200	
Underbody coating	3.6	430	
Uniform finish coating	4.5	540	

<sup>&</sup>lt;sup>€</sup>VOC regulatory limit as applied = weight of VOC per volume of coating (prepared to manufacturer's recommended maximum VOC content, minus water and non-VOC solvents)

- C. Each cleaning solvent present at the facility shall not exceed a VOC content of twenty-five (25) grams per liter (twenty-one one-hundredths (0.21) pound per gallon), calculated in accordance with Condition II(d) of this permit, except for [20 DCMR 718.4]:
  - i. Cleaning solvent used as bug and tar remover if the VOC content of the cleaning solvent does not exceed three hundred fifty (350) grams per liter (two and nine-tenths (2.9) pounds per gallon), where usage of cleaning solvent used

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as bug and tar remover is limited as follows:

- 1. Twenty (20) gallons in any consecutive twelve-month (12) period for an automotive refinishing facility and operations with four hundred (400) gallons or more of coating usage during the preceding twelve (12) calendar months;
- 2. Fifteen (15) gallons in any consecutive twelve-month (12) period for an automotive refinishing facility and operations with one hundred fifty (150) gallons or more of coating usage during the preceding twelve (12) calendar months; or
- 3. Ten (10) gallons in any consecutive twelve-month (12) period for an automotive refinishing facility and operations with less than one hundred fifty (150) gallons of coating usage during the preceding twelve (12) calendar months;
- ii. Cleaning solvents used to clean plastic parts just prior to coating or VOC-containing materials for the removal of wax and grease provided that non-aerosol, hand-held spray bottles are used with a maximum cleaning solvent VOC content of seven hundred eighty (780) grams per liter and the total volume of the cleaning solvent does not exceed twenty (20) gallons per consecutive twelve-month (12) period per automotive refinishing facility;
- iii. Aerosol cleaning solvents if one hundred sixty (160) ounces or less are used per day per automotive refinishing facility; or
- iv. Cleaning solvent with a VOC content no greater than three hundred fifty (350) grams per liter may be used at a volume equal to two-and-one-half percent (2.5%) of the preceding calendar year's annual coating usage up to a maximum of fifteen (15) gallons per calendar year of cleaning solvent.
- D. The VOC content of an automotive coating, automotive coating component, or cleaning solvent shall be calculated in accordance with the following, where [20 DCMR 718.6]:

VOC = VOC content in grams per liter;

Wv = Weight of total volatiles, in grams;

Ww = Weight of water, in grams;

Wec = Weight of exempt compounds, in grams;

Vm = Volume of material (coating or cleaning solvent, as applicable, including water, exempt compounds, and added solvent), in liters;

Vw = Volume of water, in liters; and

Vec = Volume of exempt compounds, in liters; and

To convert from grams per liter to pounds per gallon, multiply the result (VOC regulatory content) by  $8.345 \times 10^{-3}$  (pounds per gallon/grams per liter).

i. For VOC regulatory content for coatings, the weight of VOC per volume of coating, less water and exempt compounds, shall be calculated by the following equation:

VOC regulatory = 
$$\frac{(Wv - Ww - Wec)}{(Vm - Vw - Vec)}$$

ii. For VOC actual content for coatings, the weight of VOC per volume of material, including the volume of water, exempt compounds and VOC solvent, shall be calculated by the following equation:

$$\begin{array}{ccc}
VOC & & & & & & & & & \\
actual & & & & & & & \\
content & & & & & & & \\
\end{array}$$

iii. For VOC content for cleaning solvents, the weight of VOC per volume of material shall be calculated by the following equation:

$$\frac{\text{VOC}}{\text{content}} = \frac{(\text{Wv - Ww - Wec})}{\text{Vm}}$$

- E. To determine the physical properties of a coating to perform the calculations above, the coating shall be analyzed in accordance with the methods specified in 20 DCMR 718.28 (relating to coating analysis). [20 DCMR 718.7]
- F. If on the container of an automotive coating, or a label or sticker affixed to the container, or in sales, advertising, technical, or product literature, a representation is made that indicates that the coating meets the definition of or is recommended for use for more than one (1) of the coating categories listed in Condition II(b) (relating to coating VOC content limits), then the lowest applicable VOC content limit shall apply. [20 DCMR 718.8]
- G. The Permittee may not possess either of the following [20 DCMR 718.9]:
  - i. An automotive coating that is not in compliance with Condition II(b) (relating to coating VOC content limits); and
  - ii. A cleaning solvent that does not meet the requirements of Condition II(c) (relating to cleaning solvent VOC content limits).

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- H. 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]
- I. Visible emissions shall not be emitted into the outdoor atmosphere from the paint booth. [20 DCMR 201.1, 20 DCMR 606, and 20 DCMR 903.1]

#### 3. Operational Limits and Standards:

- A. The Permittee may not apply an automotive coating to a motor vehicle, mobile equipment, or associated parts and components, unless one (1) or more of the following application methods is used [20 DCMR 718.11]:
  - i. Flow/curtain coating;
  - ii. Dip coating;
  - iii. Roller coating;
  - iv. Brush coating;
  - v. Cotton-tipped swab application;
  - vi. Spray-applied coatings limited to:
    - 1. High-volume low-pressure (HVLP) spraying;
    - 2. Electrostatic application;
    - 3. Airless spray; and
    - 4. Air-assisted airless spray; or
  - vii. An alternative method approved in accordance with 20 DCMR 718.11(g) or (h).
- B. The application requirements of Condition III(k)(3)(A) (relating to coating application methods) do not apply to the following [20 DCMR 718.12]:
  - i. Graphic arts operations;
  - ii. A coating use of less than one (1) fluid ounce (twenty-nine and six tenths (29.6) milliliters);

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- iii. The application of underbody coatings; and
- iv. The application of truck bed liner coatings.
- C. The Permittee shall ensure that all emissions from the application of automotive coatings for motor vehicle and mobile equipment be exhausted through a stack that meets all of the following requirements [20 DCMR 718.19]:<sup>4</sup>
  - i. Discharges at least fifteen (15) feet above grade;
  - ii. Discharges at least five (5) feet above the roof peak;
  - iii. Discharges vertically upward above the roof peak;
  - iv. Discharges at a height and exhaust velocity sufficient to avoid the exhaust being circulated adjacent to the building due to building downwash effects or drawn into nearby building intakes so as to ensure compliance with 20 DCMR 201 and 20 DCMR0 903; and
  - v. Not equipped with anything that would impede the upward discharge of the exhaust air, such as rain caps. Other techniques may be installed to prevent snow and ice from entering the exhaust system, such as butterfly caps or stack sleeves.
- D. Spray guns used to apply automotive coating components or automotive coatings shall be cleaned by one (1) or a combination of the following [20 DCMR 718.15]:
  - i. A fully enclosed spray gun cleaning system that is kept closed when not in use, where the active and passive solvent losses from the use of the system shall be determined in accordance with the requirements of 20 DCMR 718.34;
  - ii. An unatomized discharge of cleaning solvent into a paint waste container that is kept closed when not in use; or
  - iii. Disassembly of the spray gun and cleaning in a vat that is kept closed when not in use.
- E. The paint spray booth shall meet the following specifications and operational requirements:

 $<sup>^4</sup>$  At the time of permitting, PB-362-1 does not meet the requirements of Condition III(k)(3)(C). The Permittee shall comply with the compliance plan in Condition VI of this permit for this unit before operating PB-362-1.

- i. The unit shall be fitted with a type of filter technology that is demonstrated to achieve at least 98-percent capture of paint overspray. [20 DCMR 718.17(b)]
- ii. The particulate matter exhaust filters shall be maintained and replaced as follows:
  - <u>1</u>. For units PB-411-1 and PB-411-2, the floor filters (exhaust filters) shall be replaced every 80 hours of booth (blower) runtime. This shall be measured with the use of a runtime meter. Once booth has reached 80 hours of runtime since the last exhaust filter change-out, no further active painting shall be performed in the booth until the filters have been changed. If a complete paint job is in the booth and drying when the runtime reaches 80 hours from the last change-out, the drying step may be completed before filter change-out. Additionally, filters shall be replaced as needed whenever a filter deficiency is identified.
  - 2. For unit PB-362-1, the exhaust filters shall be changed out in accordance with a frequency approved in writing by the Department and consistent with manufacturers' specifications and whenever a filter deficiency is identified. To obtain such written approval, the Permittee shall submit a request directed to the Department's Air Quality Division (AQD) Permitting Branch Chief in writing (written or email) and provide a justification for any proposed frequency. Any relevant manufacturer's recommendations shall be included with the submittal. Additionally, a monitoring and record keeping method for ensuring compliance with the approved frequency shall be included with the proposal and followed upon approval by the Department.
  - 3. For each paint booth, there shall be at least one set of replacement exhaust filters maintained onsite at all times (except a reasonable time immediately after replacement to allow for shipping of new filters, in which case the Permittee shall be able to show that new filters have been ordered). [20 DCMR 201]
- iii. The unit shall be fully enclosed with a full roof and four complete walls and must be ventilated at negative pressure so that air is drawn into any openings in the booth walls. [20 DCMR 718.17(b)] The negative pressure maintained shall be sufficient to ensure that no emissions are exiting the booth anywhere except the exhaust stack. [20 DCMR 718.17(c)]
- iv. The Permittee shall close all paint spray booth openings while a coating is applied, during the time period required for drying of the coating, and while any other operation may release emissions. [20 DCMR 718.17(a)]

- v. The Permittee shall maintain in good working order and operate according to manufacturer specifications the monitoring, exhaust, and control systems within the paint spray booth. [20 DCMR 718.17(d)]
- F. The Permittee shall ensure that [20 DCMR 718.16]:
  - Fresh and used automotive coating components, automotive coatings, solvents, and cleaning solvents are stored in vapor-tight, nonabsorbent, nonleaking containers that are kept closed at all times except when filling or emptying;
  - ii. Cloth and paper, or other absorbent applicators, moistened with automotive coating components, automotive coatings, solvents, or cleaning solvents are stored in vapor-tight, nonabsorbent, nonleaking containers that are kept closed at all times except when filling or emptying;
  - iii. Handling and transfer procedures minimize spills during the transfer of automotive coating components, automotive coatings, solvents, and cleaning solvents;
  - iv. Any person who uses or applies automotive coating components, automotive coatings, solvents, or cleaning solvents is trained in the proper use and handling of the automotive coating components, automotive coatings, solvents, cleaning solvents, and waste products in order to minimize the emission of air contaminants and to comply with the requirements of 20 DCMR 718, as incorporated into the conditions of this permit; and
  - v. Ensure that all training is in compliance with the requirements of Condition III(k)(3)(G).
- G. The Permittee shall comply with the following training measures [20 DCMR 718.16(e)]:
  - i. Ensure that any person who applies mobile equipment repair and refinishing coatings is trained in the proper use and handling of the mobile equipment repair and refinishing coatings, solvents and waste products.
  - ii. All painters must be certified that they have completed training in the proper spray application of surface coatings and the proper setup and maintenance of spray equipment. The minimum requirements for such training and certification are described in Condition III(k)(3)(G)(iii) of this permit. The spray application of surface coatings is prohibited by persons who are not certified as having completed the described training. The requirements of this paragraph do not apply to the students of an accredited surface coating

training program who are under the direct supervision of an instructor who meets the requirements of this paragraph.

- iii. Within 180 days of their hiring date, the Permittee must ensure and certify that all new and existing personnel, including contract personnel, who spray apply surface coatings are trained in the proper application of surface coatings as required by Condition III(k)(3)(G)(ii) of this permit. The training program must include, at a minimum, the following:
  - <u>1</u>. A list of all current personnel by name and job description who are required to be trained;
  - <u>2</u>. Hands-on classroom instruction that addresses, at a minimum, initial and refresher training in the following topics:
    - <u>a</u>. Spray gun equipment selection, set up, and operation, including measuring coating viscosity, selecting the proper fluid tip or nozzle, and achieving the proper spray pattern, air pressure and volume, and fluid delivery rate.
    - <u>b</u>. Spray technique for different types of coatings to improve transfer efficiency and minimize coating usage and overspray, including maintaining the correct spray gun distance and angle to the part, using proper banding and overlap, and reducing lead and lag spraying at the beginning and end of each stroke.
    - <u>c</u>. Routine spray booth and filter maintenance, including filter selection and installation.

If the Permittee can show by documentation or certification that a painter's work experience and/or training has resulted in training equivalent to the training required in <u>a-c</u> above the Permittee is not required to provide this training to these painters.

Painter training that was completed within five years prior to the date training is required, and that meets the requirements specified in <u>a-c</u> above satisfies this requirement and is valid for a period not to exceed five years after the date the training is completed.

3. A description of the methods to be used at the completion of the initial or refresher training to demonstrate, document, and provide certification of successful completion of the required training.

- iv. Training and certification will be valid for a period not to exceed five years after the date the training is complete, and all personnel must receive refresher training that meets the requirements of Condition III(k)(3)(G)(iii) and be recertified every five years.
- H. At all times, including periods of startup, shutdown, and malfunction, the Permittee 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.

### 4. 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).
- B. The Permittee shall track the volatile organic compound (VOC) content of all automotive coatings, automotive coating components, ready-to-spray coatings (based on the manufacturer's stated mix ratio), and cleaning solvents at the facility to ensure compliance with Conditions III(k)(2)(B), (C), and (G).
- C. The Permittee shall maintain an awareness of the area to ensure that the odor and nuisance air pollutant requirements of Condition III(k)(2)(H) are met.
- D. The Permittee shall monitor the emission point from the spray booth to ensure that the requirements of Condition III(k)(2)(I) are met.
- E. The Permittee shall monitor the backup stores of spray booth filters to ensure that all filters meet the requirements of Conditions  $III(k)(3)(E)(ii)(\underline{3})$ .
- F. The Permittee shall monitor the maintenance and operational status of the spray booth and the activities performed in the spray booth and at the facility to ensure compliance with the requirements of Conditions III(k)(3)(E), (F), and (H). This shall include monitoring of the runtime of the blowers in booths PB-411-1 and PB-411-2 using an installed runtime meter to ensure compliance with Condition III(d)(3)(E)(ii)(1).
- G. If a spray equipment coating application technology is used, the Permittee shall demonstrate that the equipment meets one of the following [20 DCMR 718.13]:

- i. The definition of HVLP spray in 20 DCMR 799 in design and use, where a satisfactory demonstration shall comply with Condition III(k)(4)(G)(ii) or be based on:
  - <u>1</u>. The manufacturer's published technical material on the design of the equipment; and
  - 2. A demonstration of the operation of the equipment using an air pressure cap test gauge from the manufacturer of the equipment; or

Note: The definition of HVLP spray in 20 DCMR 799 is as follows: spray equipment permanently labeled HVLP that is designed and operated between one tenth of a pound (0.1 lb.) and ten pounds (10.0 lb.) per square inch gauge (psig) air atomizing pressure, measured dynamically at the center of the air cap and at the air horns.

- ii. The alternative spray coating application method transfer efficiency requirement of 20 DCMR 718.11(g) (as referenced in Condition III(k)(3)(A)(vii)), where a satisfactory demonstration shall include the following:
  - 1. Written determination of the transfer efficiency in accordance with the test methods in Conditions III(k)(4)(L) and (M) (relating to spray equipment transfer efficiency and spray equipment HVLP equivalency); and
  - 2. Written documentation that the alternative spray coating application method has been approved by the Department for use in the District.
- H. If an alternative spray or non-spray coating application technology or method is used pursuant to 20 DCMR 718.11(h) (as referenced in Condition III(k)(3)(A)(vii)), the Permittee shall demonstrate its approval status in accordance with 20 DCMR 718.14.
- I. To determine compliance with this permit, the test methods specified in Conditions III(k)(4)(J) through (Q) shall be used.
- J. The test method for coating analysis shall be as follows [20 DCMR 718.28]:
  - i. To perform the calculations specified in Condition III(k)(2)(D) (related to calculation of VOC content), the physical properties of automotive coatings, automotive coating components, and cleaning solvents subject to this section shall be determined using the most recent version of one of the following:
    - 1. EPA Reference Method 24, Determination of Volatile Matter Content,

Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings, 40 CFR Part 60, Appendix A;

- 2. SCAQMD Method 304-91, Determination of Volatile Organic Compounds (VOC) in Various Materials; or
- <u>3</u>. An alternative method, formulation data, or other reasonable means for predicting that the coating has been formulated as intended, if approved in writing by the Department.
- ii. If there are inconsistencies between the results of an EPA Reference Method 24 test and another means for determining the physical properties of the coating and subsequent VOC content, the EPA Reference Method 24 test results shall govern, except when an alternative method is approved as specified in Condition III(k)(4)(J)(i)(3).
- K. The identity and concentration of exempt organic compounds shall be determined using the most recent version of one (1) or more of the following [20 DCMR 718.29]:
  - 1. ASTM D6133, Standard Test Method for Acetone, p-Chlorobenzotrifluoride, Methyl Acetate or t-Butyl Acetate Content of Solventborne and Waterborne Paints, Coatings, Resins, and Raw Materials by Direct Injection Into a Gas Chromatograph;
  - 2. ASTM D4457, Standard Test Method for Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph;
  - 3. CARB Method 432, Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings;
  - 4. CARB Method 422, Determination of Volatile Organic Compounds in Emissions from Stationary Sources; or
  - 5. SCAQMD Method 303, Determination of Exempt Compounds.
- L. Measurement of acid content in automotive pretreatment coating, as specified in 20 DCMR 799 (defining automotive pretreatment coatings), shall be determined by using the most recent version of ASTM D1613, *Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates Used in Paint, Varnish, Lacquer, and Related Products.* [20 DCMR 718.30]

- M. The metallic content of a metallic or iridescent color coating, as specified in 20 DCMR 799 (defining metallic/iridescent color coating), shall be determined by the most recent version of SCAQMD Method 318, *Determination of Weight Percent Elemental Metal in Coatings by X-ray*. [20 DCMR 718.31]
- N. Spray equipment transfer efficiency, as specified in 20 DCMR 799 and 20 DCMR 718.11(g), as referenced in Condition III(k)(3)(A)(vii), (defining and relating to coating application methods, respectively), shall be determined by using the most recent version of the SCAQMD Test Procedure, *Spray Equipment Transfer Efficiency Test Procedure for Equipment User*. [20 DCMR 718.32]
- O. Spray equipment HVLP equivalency, as specified in Condition III(k)(4)(G) (relating to the use of a spray gun), shall be determined by using the most recent version of one of the following [20 DCMR 718.33]:
  - i. SCAQMD Guidelines, Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns; or
  - ii. The Environmental Technology Verification ETV Protocol, *HVLP Coating Equipment, Generic Testing and Quality Assurance Protocol*, prepared by the National Defense Center for Environmental Excellence, operated by Concurrent Technologies Corporation.
- P. The active and passive solvent losses from the use of an enclosed spray gun cleaning system or equivalent cleaning system, as specified in Condition III(k)(3)(D)(i) (relating to spray gun cleaning systems), shall be determined using the most recent version of SCAQMD Method, General Test Method for Determining Solvent Losses from Spray Gun Cleaning Systems. [20 DCMR 718.34]
  - i. The test solvent for this determination shall be a lacquer thinner with a minimum vapor pressure of one hundred five millimeters (105 mm) of mercury at twenty degrees Celsius (20°C); and
  - ii. The minimum test temperature shall be fifteen degrees Celsius (15°C).
- Q. The use of other test methods that are determined to be equivalent or better and approved, in writing, by the Department or the Administrator may be used in place of the test methods specified in Conditions III(k)(4)(J) through (P). [20 DCMR 718.36]

#### 5. Record Keeping Requirements:

The Permittee shall maintain the following records for not less than five years from

the date of each record and shall make such records available to the Department for inspection upon request. [20 DCMR 500.1, 20 DCMR 500.8 and 20 DCMR 718.23]

- A. The Permittee shall maintain records of the types of chemical paint strippers used at the facility as well as their chemical make-up.
- B. For any automotive coatings, automotive coating components, ready-to-spray coatings (based on the manufacturer's stated mix ratio), and cleaning solvents used at the facility, the Permittee shall maintain and have available at all times at the facility the following [20 DCMR 718.24]:
  - i. A list of all coatings, coating components, and cleaning solvents used at the automotive refinishing facility, including:
    - 1. Whether the material is a coating, coating component, or cleaning solvent;
    - 2. Coating, coating component, or cleaning solvent name and manufacturer;
    - 3. Application method;
    - 4. Coating type as listed in Condition III(k)(2)(B), Table I (relating to coating VOC content limits);
    - 5. The mix ratio specific to the coating or coating component; and
    - 6. The VOC actual content and VOC regulatory content, as applied, for each ready to spray or ready to apply coating or cleaning solvent and copies of data sheets documenting how as applied values were determined;
  - ii. The VOC actual and VOC regulatory content as supplied and copies of product data sheets, material safety data sheets, or other data sheets documenting the as supplied value; and
  - iii. Purchase records identifying the following:
    - <u>1</u>. The coating type (as listed in Condition III(k)(2)(B), Table I of this permit);
    - 2. The name of the coating, coating component, or cleaning solvent; and
    - <u>3</u>. The volume purchased of the coating, coating component, or cleaning solvent.

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- C. The Permittee shall maintain records of the type(s) of spray guns and other coating application methods in use and the results of any compliance demonstrations performed pursuant to Condition III(k)(4)(G) or (H).
- D. The Permittee shall maintain records of the type and capture efficiency (also known as arrestance) of all spray booth filters used at the facility.
- E. The Permittee shall maintain records of the replacement dates of all spray booth filters as well as (for PB-411-1 and PB-411-2) records of the runtime at the time of filter replacement and (for PB-362-1) any records specified in the Department-approved filter replacement plan, to document compliance with Condition III(k)(3)(E)(ii).
- F. The Permittee shall maintain records of all maintenance performed on the spray booth.
- G. The Permittee shall maintain records of certifications that each painter has completed the training specified in Condition III(k)(3)(G)(iii).
- H. The Permittee shall maintain records of all painter training required under Condition III(k)(3)(G) of this permit.
- I. The Permittee shall maintain copies of any notification and report required under Condition III(k)(4) of this permit.
- J. The Permittee shall maintain records of any deviation from the requirements of this permit. These records must include the date and time period of the deviation and a description of the nature of the deviation and the actions taken to correct the deviation.
- 1. Emission Units: Parts washers and degreasers as follows:

Emission Unit ID	Emission Unit Location <sup>£</sup>	Unit Description	Degreaser Type
DG-411-1	Building 411 paint mix room	Parts washer for paint booth spray guns, Herkules Model GW/R, Serial No. 606320	Remote Reservoir
DG-411-2	Building 411 garage bay	Degreaser for transmission parts, Zep Model Dyna Brute	Immersion

<sup>&</sup>lt;sup>£</sup> Building 362 and Building 1311 have parts washers that use a non-VOC detergent. Therefore, these units are not listed as emission units in this section.

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The parts washers shall meet the following requirements:

### 1. Emission Limitations:

- A. 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]
- B. No solvents shall be used in the units that contain halogenated hazardous air pollutant (HAP) solvents in excess of five percent (5%) by weight as follows [20 DCMR 201]:
  - i. Methylene chloride;
  - ii. Perchloroethylene;
  - iii. Trichloroethylene;
  - iv. 1,1,1-trichloroethane;
  - v. Carbon tetrachloride; or
  - vi. Chloroform.

## 2. Operational Limitations:

- A. Immersion cold cleaning machines shall have a freeboard ratio of seventy-five one hundredths (0.75) or greater, unless the machines are equipped with covers that are kept closed except when parts are being placed into or are being removed from the machine. [20 DCMR 764.2] Note that the immersion cold cleaning machines do not have the required freeboard ratio, and therefore must be kept closed except when parts are being placed into or are being removed from the machines.
- B. Immersion cold cleaning machines and remote reservoir cold cleaning machines shall [20 DCMR 764.3]:
  - i. Have a permanent, conspicuous label summarizing the operating requirements in Condition III(1)(2)(C); and
  - ii. Be equipped with a cover that shall be closed at all times except during cleaning of parts or the addition or removal of solvent. For remote reservoir cold cleaning machines that drain directly into the solvent storage reservoir, a perforated drain with a diameter of not more than six inches (6 in.) shall constitute an acceptable cover.

- C. Cold cleaning machines shall be operated in accordance with the following procedures [20 DCMR 764.4]:
  - i. Waste solvent shall be collected and stored in closed containers. The closed containers may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container;
  - ii. Cleaned parts shall be drained at least fifteen (15) seconds or until dripping ceases, whichever is longer;
    - 1. Parts having cavities or blind holes shall be tipped or rotated while the part is draining; and
    - <u>2</u>. During the draining, tipping or rotating, the parts shall be positioned so that solvent drains directly back to the cold cleaning machine.
  - iii. Flushing of parts using a flexible hose or other flushing device shall be performed only within the freeboard area of the cold cleaning machine. The solvent spray shall be a solid fluid stream, not an atomized or shower spray, at a pressure that does not exceed ten pounds (10 lb.) per square inch gauge (psig);
  - iv. The Permittee shall ensure that when the cover is open, the cold cleaning machine is not exposed to drafts greater than forty meters (40 m.) per minute (one hundred thirty-two feet (132 ft.) per minute), as measured between one meter (1 m.) and two meters (2 m.) (three and three tenths feet (3.3 ft.) and six and six tenths feet (6.6 ft.) upwind, and at the same elevation as the tank lip;
  - v. Sponges, fabric, wood, leather, paper products, and other absorbent materials shall not be cleaned in the cold cleaning machine;
  - vi. When a pump agitated solvent bath is used, the agitator shall be operated to produce a rolling motion of the solvent with no observable splashing of the solvent against the tank walls or the parts being cleaned. Air-agitated solvent baths may not be used;
  - vii. Spills during solvent transfer and use of the cold cleaning machine shall be cleaned up immediately, and the wipe rags or other absorbent materials shall be immediately stored in covered containers for disposal or recycling;
  - viii. Work area fans shall be located and positioned so that they do not blow across the opening of the degreaser unit; and
  - ix. The Permittee shall ensure that the solvent level does not exceed the fill line.
- D. Any solvent for use in a cold cleaning machine shall not have a vapor pressure of

one millimeter of mercury (1.0 mm. Hg) or greater, measured at twenty degrees Celsius (20° C) or sixty-eight degrees Fahrenheit (68° F) containing VOCs. [20 DCMR 764.5]

- E. The Permittee shall not purchase and use, in any cold cleaning machine, any solvent containing VOCs for use in a cold cleaning machine unless the solvent supplier provides the following written information to the Permittee [20 DCMR 764.6]:
  - i. The name and address of the solvent supplier;
  - ii. The type of solvent, including the product or vendor identification number; and
  - iii. The vapor pressure of the solvent, measured in millimeters of mercury (mm Hg) at twenty degrees Celsius (20° C) or sixty-eight degrees Fahrenheit (68° F).

#### 3. Monitoring and Testing Requirements:

- A. The Permittee shall monitor any odor emitted from the facility and take any actions necessary to ensure compliance with Condition III(1)(1)(A).
- B. The Permittee shall monitor the operating procedures of the cold-cleaning degreasers to ensure compliance with Condition III(1)(2)(B), (C), and (D).

#### 4. Record Keeping Requirements:

- A. The Permittee shall maintain for not less than five (5) years and shall provide to the Department, on request, the information specified in Condition III(l)(2)(E). An invoice, bill of sale, certificate that corresponds to a number of sales, Material Safety Data Sheet (MSDS), or other appropriate documentation acceptable to the Department may be used to comply with this section. [20 DCMR 764.7 and 20 DCMR 302.1(c)(2)(B)]
- B. The Permittee shall maintain for not less than five (5) years, and shall provide to the Department, on request, documentation that any solvent(s) used in the parts washers complies with Condition III(1)(1)(B).
- C. If any of the parts washers covered herein are moved to a different location in the facility than that specified in the table at the beginning of Condition III of this permit and repeated at the beginning of Condition III(l), the Permittee shall submit, in writing, a notification of which unit is being moved, and its new location to the Department within ten business days of the relocation. Such a move will be considered an off-permit change under Condition I(l) of this permit,

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> and the Permittee shall comply with the requirements of that section whenever this occurs. The notification to the Department shall be sent to:

Chief, Permitting Branch Air Quality Division 1200 First Street NE, 5th Floor Washington, DC 20002

m. <u>Emission Unit:</u> Indoor firing range (Emissions Unit ID PM-397-1) located at Building 397

#### 1. <u>Emission Limitations</u>:

- A. Emissions of dust shall be minimized in accordance with the requirements of 20 DCMR 605 and "Operational Limitations" of this permit.
- B. The emission of fugitive dust from the indoor firing range facility is prohibited. [20 DCMR 605.2]
- C. The discharge of particulate matter into the atmosphere from any process shall not exceed three hundreds (0.03) grains per dry standard cubic foot of the exhaust. [20 DCMR 603.1]
- D. Visible emissions shall not be emitted into the outdoor atmosphere from the firing range. [20 DCMR 201 and 20 DCMR 606.1]
- E. 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]

#### 2. Operational Limitations:

- A. All air vented from the firing range shall be vented through the three-stage filtration system installed on the exhaust system for the firing range. The systems shall be fitted with a MERV 8 Stage 1 filter (or filter bank), MERV 13 Stage 2 filter (or filter bank), and a final High Efficiency Particulate Air (HEPA) Stage 3 filter (or filter bank).
- B. The filters used in the systems shall be rated with the following minimum dust control efficiencies:
  - i. MERV 8 filters shall be rated to maintain a minimum of 90% efficiency;

- ii. MERV 13 filters shall be rated to maintain a minimum 98% dust control efficiency; and
- iii. The HEPA filters shall be rated to maintain a minimum 99.99% control efficiency.
- C. The filters shall be replaced whenever they are found to have failed or been damaged, or on the following frequencies, whichever is more frequent:
  - i. The MERV 8 Stage 1 filters shall be changed at least quarterly;
  - ii. The MERV 13 Stage 2 filters shall be replaced at least semi-annually; and
  - iii. The HEPA Stage 3 filters shall be replaced at least annually.
- D. A set of replacement of MERV 8, MERV 13, and HEPA filters shall be kept on site at all times.
- E. At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the indoor firing range 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 606.3]

# 3. Monitoring and Testing Requirements:

- A. The Permittee inspect all filters at least quarterly to ensure that they have not failed or been damaged and shall promptly replace any failed or damaged filters.
- B. If visible emissions of fugitive dust or smoke are observed in excess of the limits specified in Conditions III(m)(1)(B) or (D), prompt action shall be taken to correct the problem. Operations shall not continue if such exceedances are observable, until such time as the problem has been addressed to the satisfaction of the Department.
- C. The Permittee shall monitor any odor emitted from the indoor firing range facility and take any actions necessary to ensure compliance with Condition III(m)(1)(E).
- D. The permittee shall monitor the conditions at the site and take any actions necessary to ensure compliance with the operational requirements of Condition III(m)(2)(E).

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## 4. Record Keeping Requirements:

- A. The Permittee shall record in a log the results and dates of all filter inspections and change-outs.
- B. The Permittee shall keep a record of all identified exceedances of limits and deviations from the standards and requirements set forth in Condition III(m) and the actions taken to correct the identified problems.
- C. The Permittee shall maintain a record of all maintenance performed on the indoor firing range ventilation systems to document compliance with Condition III(m)(2)(E).
- D. The Permittee shall keep records of all odors identified pursuant to Condition III(m)(3)(C) and the action(s) taken to correct them.
- E. The Permittee shall maintain a copy of the indoor firing rage's filter manufacturer's maintenance and operating recommendations and make such available to Department inspectors.
- F. The Permittee shall maintain a copy of all specifications for the filters used for this equipment. These specification shall document compliance with the control efficiency requirements specified in Condition III(m)(2)(B).
- n. Emission Units: Two (2) woodshops with dust collectors vented outdoors, as follows:

Emission Unit ID	Emission Unit Location	Ch. 2 Permit No. †	Description
PM-371-1	Building 371 Woodshop	-	Dust collector for wood working shop
PM-399-2	Building 399 1st Floor Wood Working Shop	7269	ArrestAll AR6-25 dust collector for wood working shop, Serial No. ARS190016

The Chapter 2 permit numbers listed here are for reference only. The requirements of the Chapter 2 permits have been incorporated into this permit and the separate Chapter 2 permit documents are no longer maintained.

Each of these units shall comply with the following:

#### 1. Emission Limitations:

- A. Total suspended particulate matter (TSP) emissions from the dust collectors shall not exceed [20 DCMR 201 and 20 DCMR 603]:
  - i. 0.03 gr/dscf from each dust collector;
  - ii. 61.0 lbs per year from PM-371-1; and

- iii. 29.1 lbs per year from PM-399-2.
- B. Adding diluent air to the gas stream to comply with Condition III(n)(1)(A) is prohibited. [20 DCMR 603.3]
- C. 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]
- D. Visible emissions shall not be emitted into the outdoor atmosphere from this equipment. [20 DCMR 201 and 20 DCMR 606.1].

#### 2. Operational Limitations:

- A. The dust collectors shall be constructed, maintained, and operated such that they achieve the following [20 DCMR 201]:
  - i. For unit PM-399-2, it achieves at least 99.9% efficiency for control of dust from the woodworking operation; and
  - ii. For unit PM-371-1, it achieves at least a 60% efficiency for control of dust from the woodworking operation.
- B. The Permittee shall properly operate and maintain the dust collection systems, including collection trunks and blowers so as to minimize emissions from woodworking operations. [20 DCMR 201]
- C. The dust collectors shall be operated and maintained in accordance with the manufacturer's operational and maintenance procedures in order to minimize emissions from woodworking operations. [20 DCMR 201]
- D. For unit PM-399-2, the Permittee shall establish a minimum differential pressure across the cartridge filters at the time of initial start-up with each new full set of new cartridge filters. Whenever the differential pressure drops below this minimum level, the equipment shall be shut down and inspected and any worn or damaged filters shall be replaced. If a full set of new filters is not installed, the previous minimum differential pressure level shall be maintained. [20 DCMR 201]
- E. The Permittee shall maintain sufficient stores of cartridge filters and filter socks (as applicable) in a readily available location to allow for prompt replacement of any worn or damaged filters. [20 DCMR 201]

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## 3. Monitoring and Testing Requirements:

- A. The Permittee shall monitor the physical condition of each dust collector and repair or replace any damaged components. [20 DCMR 201.1]
- B. The Permittee shall periodically check the shaker system for each unit and ensure that it is properly operating. If maintenance issues are identified, the Permittee shall promptly make repairs as necessary for proper operation. [20 DCMR 201]
- C. For unit PM-399-2, the Permittee shall use a properly installed and maintained differential pressure monitoring device to monitor the pressure drop across the cartridge filters to assure normal operating conditions. The pressure drop shall be monitored at least once per day during operations to ensure that the differential pressure remains above the minimum pressure drop established pursuant to Condition III(n)(2)(D) and otherwise within proper operating parameters. In lieu of manual monitoring, an electronic monitoring system may be used if appropriate alarms are installed to ensure that operations are maintained within the proper operating range and that the system records a log of readings consistent with the record keeping requirements of this permit. [20 DCMR 201]
- D. The Permittee shall monitor exhaust from the dust collectors to ensure compliance with Condition III(n)(1)(D).
- E. The Permittee shall visually inspect and empty the dust collectors quarterly or at a frequency that ensures proper operation of the dust collector. [20 DCMR 201]
- F. The Permittee shall monitor dust disposal to minimize fugitive emissions [20 DCMR 201]
- G. The Permittee shall inspect the filter media as needed and at least on the following schedule and shall replace the filters as needed to ensure continual proper operation of the dust collectors: [20 DCMR 201]
  - i. The equipment shall be inspected at least annually for unit PM-399-2; and
  - ii. The equipment shall be inspected at least guarterly for unit PM-371-1.
- H. The Permittee shall conduct and allow the Department access to conduct tests of air pollution emissions from any source as requested. [20 DCMR 502.1]

- 4. Record Keeping and Reporting Requirements: [20 DCMR 200.7]
  - A. The following information shall be recorded, initialed, and maintained in a log at the facility for a period not less than five (5) years from the date the information is obtained [20 DCMR 302.1(c)(2)(B) and 20 DCMR 500.8]:
    - i. The documentation of the results of all inspections pursuant to Conditions III(n)(3)(B), (E), and (G);
    - ii. Records of the date, description, and who performed the any maintenance on the equipment [Note that these records must be sufficient to document that the Permittee is complying with the requirements of Condition III(n)(2)(B) and (C)];
    - ii. Records of the brand, type, and filter efficiency of all filter media used in the equipment, as well as the dates such filter media were replaced. Such records will be used to document compliance with Condition III(n)(1)(a) except where more specific information is available, such as testing performed pursuant to Condition III(n)(3)(H);
    - iv. Records of the results of differential pressure monitoring for unit PM-399-2 performed upon start-up of the equipment each time a full set of cartridge filters are installed. These data shall be subsequently used as the minimum differential pressure allowable in across the filters, pursuant to Condition III(n)(3)(C);
    - v. Records of all differential pressure monitoring performed pursuant to Condition III(n)(3)(C);
    - vi. Records of the results of any visible emissions monitoring performed;
    - vii. Records of the occurrence and duration of each malfunction of operation; and
    - viii. Records of the actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation;
    - ix. Records of the quantity of dust collected from each operation, updated at the time of emptying or replacement of the collection barrels;
    - x. Records of the emissions of particulate matter from each unit, updated

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monthly, and maintained in a 12-month rolling sum format<sup>5</sup>; and

- B. The Permittee shall maintain a copy of each dust collector manufacturer's maintenance and operating recommendations at the facility for the life of the unit. [20 DCMR 500.1]
- C. The Permittee shall maintain a copy of the results of any tests performed pursuant Condition III(n)(3)(H) at the facility for the life of the unit.

### IV. Miscellaneous/Insignificant Activities

- a. The Department does not consider the "miscellaneous activities" (also commonly known as "insignificant activities") listed in Condition IV(d) to be significant sources. However, they are subject to the General Permit Requirements (Condition I) and Facility-Wide Permit Requirements (Condition II) of this permit as well as the conditions specified below for each unit type. [See EPA White Paper 1, Wegman, July 10, 1995]
- b. Emissions from the miscellaneous activities listed in Condition IV(d) 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(d)(2)(C) of this permit. [20 DCMR 500]
- c. The Permittee shall maintain an inventory of the miscellaneous/insignificant activities listed in Condition IV of this permit and shall submit a current copy of this inventory to the Department annually with the annual Title V certification report.
- d. The following activities are subject to Condition IV(a), (b), and (c) as well as the conditions specified below (where applicable):
  - 1. Aboveground Storage Tanks (ASTs): JBAB has ASTs ranging in sizes from 75 to 30,000 gallons. Most ASTs store No. 2 fuel oil for emergency engines and boilers. ASTs are also used to store jet fuel, antifreeze, used oil, waste oil, and motor oil located in the auto hobby shop, the vehicle ops shop, DCNG, the postal service, and the secret service:

<sup>&</sup>lt;sup>5</sup> Emissions from the dust collectors shall be based on the total number of drums of sawdust collected over the previous 12-month period, multiplied by the volume of the drums in gallons, and converted to pounds based on an assumed sawdust density of  $19.0~\rm lb/ft^3$ . Control efficiency shall be based on the applicable minimum control efficiency allowed pursuant to Condition III(n)(2)(A), unless other credible evidence exists indicating another control efficiency should be used.

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- 2. One (1) 250-gallon AST (Emission Unit TK-398-5) for storage of gasoline. *Note that this unit is not subject to the Stage I requirements of 20 DCMR 704;*
- 3. USTs ranging in sizes from 1,000 to 15,000 gallons for storage of jet fuel, No. 2 fuel oil, biodiesel, and waste oil;
- 4. Welding operations;
- 5. Oil water separators;
- 6. Parts washers/degreasers using unheated solvents containing less than 5% VOC and less than 5% hazardous air pollutant (HAP) by weight (see the definition of "cold cleaning machine" in 20 DCMR 799);
- 7. Dust collectors venting indoors, including those for sandblasters, woodworking shops, a paper shredder, and conventional and digital book/paper binders, shall comply with the following:

All captured dust emissions shall be controlled by an exhaust system attached to a baghouse unit or other filter system which collects the particulates into a barrel or other container and vents cleaned air within the building. The baghouse units and other filter systems shall be maintained in accordance with the recommendations of the manufacturers;

- 8. Laser engravers;
- 9. Paper and metal recycling unit;
- 10. Fuel burning equipment (as defined in 20 DCMR 199) with heat input ratings less than 5 MMBTU per hour in the following categories:
  - Hot water heaters (as defined at 40 CFR 63.11237) with heat input ratings less than 1.6 million BTU per hour, and that burn only natural gas and/or No. 2 fuel oil:
  - Small boilers with heat input ratings less than five (5) MMBTU/hr and burning natural gas only;
  - Heating, air conditioning, and refrigeration operations (except as covered by Condition II(l) of this permit) including No. 2 fuel oil and natural gas fired space heaters/furnaces, packaged Heating, Ventilation, and Air-Conditioning (HVAC) units with heat input ratings less than 1.6 MMBTU/hr;
  - Laundry Dryers with heat input ratings less than 5 MMBTU/hr and burning natural gas only; and
  - Natural gas fired kitchen equipment including dining facilities

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shall comply with the following requirements:

## A. Emission Limits:

- i. Particulate matter emissions from each unit with a heat input rating less than or equal to 3.5 MMBTU/hr shall not exceed 0.13 pounds per MMBTU. [20 DCMR 600.1] Note that the Permittee is deemed to have complied with this requirement by complying with the operational limit specified in Condition IV(d)(10)(B)(i) below, unless other credible evidence of a violation of this limit is identified.
- ii. Particulate matter emissions from each unit with a heat input rating greater than 3.5 MMBTU/hr and less than 5 MMBTU/hr shall determine its particulate matter limit (to the nearest hundredth of a pound per MMBTU) from the following equation [20 DCMR 600.1]:

 $E = 0.17455 \text{ x H}^{-0.23522}$ 

Where:

E = the allowable emissions in pounds per MMBTU of heat input; and

H =the heat input of the unit in MMBTU/hr

Note that the Permittee is deemed to have complied with this requirement by complying with the operational limit specified in Condition IV(d)(10)(B)(i) below, unless other credible evidence of a violation of this limit is identified.

iii. 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 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

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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(d)(11)(A)(ii) as stated above.

### B. Operational Limits:

- i. The fuel burning equipment shall burn only natural gas or No. 2 fuel oil/diesel fuel containing no greater than 0.0015% sulfur by weight (15ppm). [20 DCMR 201]
- ii. The fuel burning equipment shall be operated at all times in a manner consistent with the manufacturer's specifications for the equipment.[20 DCMR 201.1]

#### C. Monitoring and Testing Requirements:

- i. 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]:
  - 1. One (1) original test protocol shall be submitted to the following address 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.

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

- 2. 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.
- 3. 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 shall be submitted to the address in Condition  $IV(d)(10)(C)(i)(\underline{1})$  above.
- 4. 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:

- <u>a.</u> A statement that the Permittee has reviewed the report from the emissions testing firm and agrees with the findings.
- <u>b.</u> Permit number(s) and condition(s) which are the basis for the compliance evaluation.
- c. Summary of results with respect to each permit condition.
- <u>d.</u> Statement of compliance or non-compliance with each permit condition.
- <u>5</u>. 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 Permittee shall propose corrective action(s). Failure to demonstrate compliance through the test may result in enforcement action.
- ii. The Permittee shall perform testing and/or keep records of fuel sulfur content pursuant to the requirements of Condition I(d)(2)(B)(ii).
- iii. The Permittee shall monitor fuel use to collect data on the quantities of each fuel used.

# D. Record Keeping and Reporting Requirements:

- i. The Permittee shall keep records of the results of all emissions testing required for the equipment pursuant to Conditions IV(d)(10)(C)(i) and I(a)(6) in accordance with the requirements specified in Condition I(c).
- ii. 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.
- iii. Where No. 2 fuel oil is used, the Permittee shall keep records of fuel data as required by Condition I(d)(2)(B)(ii).
- 11. Dual fuel (natural gas and No. 2 fuel oil) fired fuel burning equipment (as defined in 20 DCMR 199) with heat input ratings less than 5 MMBTU per hour but greater than 1.3 MMBTU per hour as listed in the following table:

Emission Unit ID	Emission Unit Location	Description
CU-6000-4	Building 6000 - Powerhouse	Boiler #1; 3.969 (gas)/3.848 (oil) MMBTU/hr MIURA Model EX-100, Serial No. 365314056U boiler with low NOx burners
CU-6000-5	Building 6000 - Powerhouse	Boiler #2; 3.969 (gas)/3.848 (oil) MMBTU/hr MIURA Model EX-100, Serial No. EC-17504-01 boiler with low NOx burners

These units shall meet the following requirements:

#### A. Emission Limits:

- i. Total suspended particulate matter emissions from the boilers CU-169-1 and CU-169-2 shall not exceed 0.12 pounds per million BTU. Total suspended particulate matter emissions from the boilers CU-6000-4 and CU-6000-5 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)(11)(B)(i) through (iv) below, unless other credible evidence of a violation of this limit is identified.
- ii. 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 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(d)(11)(A)(ii) as stated above.

#### B. Operational Limits:

i. The primary fuel for the boiler shall be natural gas. [20 DCMR 201]

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- ii. The alternative fuel for the boiler shall be No. 2 fuel oil that meets the following requirements except when these standards are waived in accordance with 20 DCMR 801.5, in which case 20 DCMR 801.5 and 801.6 are applicable: [20 DCMR 201, 20 DCMR 801.2(a), 20 DCMR 801.3 and 20 DCMR 801]
  - 1. On or after July 1, 2016, the fuel oil shall contain no greater than 0.05% sulfur by weight; and
  - 2. On or after July 1, 2018, the fuel oil shall contain no greater than 0.0015% sulfur by weight.
- iii. The boiler shall operate on No. 2 fuel oil only for the following reasons: [20 DCMR 201, 40 CFR 63.11195(e) and 40 CFR 63.11237]
  - 1. During periods of gas curtailment;
  - 2. During periods of gas supply interruption; or
  - <u>3</u>. For periodic testing, maintenance, or operator training on liquid fuel not to exceed a combined total of 48 hours during any calendar year.
- iv. The fuel burning equipment shall be operated at all times in a manner consistent with the manufacturer's specifications for the equipment.[20 DCMR 201.1]

## C. Monitoring and Testing Requirements:

- i. 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]:
  - 1. One (1) original test protocol shall be submitted to the following address 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.

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

- 2. The test protocol shall be approved by the Department prior to initiating any testing. Upon approval of the test protocol, the Company shall finalize the test date with the assigned inspector in the Permitting and Enforcement Branch. The Department must have the opportunity to observe the test for the results to be considered for acceptance.
- <u>3</u>. The final results of the testing shall be submitted to the Department within sixty (60) days of the test completion. One (1) original copy of the test report shall be submitted to the address in Condition IV(c)(11)(C)(i)(<u>1</u>) above.
- 4. 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:
  - <u>a.</u> A statement that the Permittee has reviewed the report from the emissions testing firm and agrees with the findings.
  - <u>b.</u> Permit number(s) and condition(s) which are the basis for the compliance evaluation.
  - c. Summary of results with respect to each permit condition.
  - <u>d.</u> Statement of compliance or non-compliance with each permit condition.
- <u>5</u>. 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 Permittee shall propose corrective action(s). Failure to demonstrate compliance through the test may result in enforcement action.
- ii. The Permittee shall perform testing and/or keep records of fuel sulfur content pursuant to the requirements of Condition I(d)(2)(B)(ii).
- iii. The Permittee shall monitor fuel use to collect data on the quantities of each fuel used.

## D. Record Keeping and Reporting Requirements:

i. The Permittee shall keep records of the results of all emissions testing

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required for the unit pursuant to Conditions IV(c)(11)(C)(i) and I(a)(6) in accordance with the requirements specified in Condition I(c).

- ii. 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.
- iii. The Permittee shall keep records of fuel data as required by Condition I(d)(2)(B)(ii).

## E. Reporting Requirements:

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

#### V. Permit Shield

No permit shield is granted. [20 DCMR 302.6]

## **VI.** Compliance Schedule

- a. The Permittee shall continue to comply with all applicable requirements. [20 DCMR 301.3(h)(5)(A)]
- b. The Permittee shall meet, in a timely manner, all applicable requirements that become effective during the term of this permit, including, but not limited to, any new air quality regulations and any specific compliance schedules adopted in response to any enforcement action taken against the Permittee by the Department or the U.S. EPA. [20 DCMR 301.5(h)(3)(B) and (C)]
- c. At the time of permitting, automotive paint booth PB-362-1 does not meet the requirements of Condition III(k)(3)(C). Prior to any operations of this unit, the Permittee shall perform the following [20 DCMR 301.5(h)(3)(D)]:
  - 1. The Permittee shall submit a design plan to modify the stack outlet to the following addresses and receive written approval of such plan:

Chief, Permitting Branch Air Quality Division Department of Energy and Environment 1200 First Street, NE, 5<sup>th</sup> Floor Washington, DC 20002

and

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### aqd.permitting@dc.gov

2. The Permittee shall implement the approved plan and shall notify the Department at the following addresses before initiating operations of the equipment. Such notification shall include a photograph of the modified stack outlet.

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

and

#### air.quality@dc.gov

- 3. The Permittee shall maintain records of all communications under Condition VI(c) for the duration of the effectiveness of this permit.
- d. At the time of permitting, E85 storage tank TK-365-2 does not have a Stage II vapor recovery system installed as required by 20 DCMR 705 and Condition III(i) of this permit. Within one (1) year of issuance of this permit, the Permittee shall install a Stage II vapor recovery system on the unit, unless 20 DCMR 705 has been revised such that no such system is required to comply with the regulation. [20 DCMR 301.5(h)(3)(D)]
- e. Every six (6) months, on the same schedule as the semi-annual reports required by Condition I(d)(1), the Permittee shall submit certified progress reports indicating the progress toward meeting the requirements of Conditions VI(c) through (e) until such requirements have been fully met and a final progress report is submitted documenting such completion. [20 DCMR 301.5(h)(4)]