

GOVERNMENT OF THE DISTRICT OF COLUMBIA

District Department of the Environment



Air Quality Division

**APPLICATION FOR SOURCE CATEGORY PERMIT TO CONSTRUCT AND OPERATE TEMPORARY PORTABLE CRUSHER/SCREEN EQUIPMENT**

*Instructions: Please complete a separate copy of this form for each crusher, crusher/screen combination unit, and stand-alone screen associated with this project.*

**1. Applicability** (Check all that are applicable)

- The equipment consists a crusher or screen or combination unit.
- The equipment is portable.
- Operation of the equipment at the site is temporary and will not exceed six (6) months.
- The equipment processes nonmetallic minerals only.
- This equipment will operate for less than 12 hours per day.
- Dust from the equipment will be controlled with wet suppression (i.e. water sprays) whenever it is in operation.
- The equipment's potential to emit (PTE) coarse particulate matter (PM<sub>10</sub>) is less than 25 tons per year (TPY). See tables 1-5 to calculate PTE and sum PM<sub>10</sub> emissions from all tables. *Note that if there is other stationary equipment installed at the site emitting PM<sub>10</sub>, this application will not be approved if all equipment combined has a PTE of PM<sub>10</sub> exceeding this level.*
- The equipment's PTE oxides of nitrogen (NO<sub>x</sub>) is less than 25 TPY. See tables 1-5 to calculate PTE and sum NO<sub>x</sub> emissions from all tables. *Note that if there is other stationary equipment installed at the site emitting NO<sub>x</sub>, this application will not be approved if all equipment combined has a PTE of NO<sub>x</sub> exceeding this level.*
- The sulfur content of the fuel used, if diesel, will not exceed 15 parts per million (0.0015% by weight).

If you have checked all items above, you are eligible for coverage under this source category permit. Please complete the remainder of this form.



green forward

DISTRICT  
DEPARTMENT  
OF THE  
ENVIRONMENT



1200 First St. NE, 5<sup>th</sup> Floor, Washington, DC 20002 | tel: 202.535.2600 | web:ddoe.dc.gov

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TEMPORARY PORTABLE CRUSHER/SCREENER EQUIPMENT**

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If you are not eligible, you may still be eligible for a standard source-specific permit. Please contact the Air Quality Division at (202) 535-2250 to discuss alternate permitting options.

If you have questions about your eligibility or how to complete this application, please contact the Air Quality Division at (202) 535-2250.

**2. Equipment Owner or Operator Information (Permit Applicant)**

---

Full Legal Name of Applicant/Organization

---

Name of Owner(s) or Principal Partner(s) of Above Organization

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Mailing Address of Owner(s) or Principal (No., Street, City, State, Zip)

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Equipment Location Address

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Name of Owner/Responsible Official, Phone Number, and Email Address

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Site Contact Person, Phone Number, and Email Address (if different from above)

**3. Job Description:**

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**4. Estimated tonnage to be crushed/screened:** \_\_\_\_\_

**5. Operating Schedule:**

Planned project start date: \_\_\_\_\_ Planned project end date: \_\_\_\_\_

Max. hours/day: \_\_\_\_\_ Max. days/week: \_\_\_\_\_ Max. total days: \_\_\_\_\_

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**6. Equipment Information:**

**Crusher or Screen**

Crusher	Screen	Manufacturer/Model	Serial No.	Capacity (tons/hr)
<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____

**Engine**

Manufacturer/Model	Serial No.	Horsepower (HP)	Diesel	Gasoline	Fuel (Gal./hr)
_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____

**7. Calculating Emissions:**

**Table 1: PM<sub>10</sub> Emissions From a Crusher:**

To calculate the emissions from a crusher, the maximum throughput rate of the crusher listed in column (a) is multiplied by the emission and conversion factors listed in columns (b) and (c).

Equipment ID #	Maximum Throughput Rate (ton/hr) (a)	Emission Factor (lb/ton) (b)	Conversion Factor (ton-hr/lb-yr) (c)	Emissions (ton/yr) (a x b x c)
		<b>0.00054</b>	<b>1.095</b>	

**Table 2: PM<sub>10</sub> Emissions From a Screen:**

To calculate the emissions from a screen, the maximum throughput rate of the screen listed in column (a) is multiplied by the emission and conversion factors listed in columns (b) and (c).

Operation	Maximum Throughput Rate (ton/hr) (a)	Emission Factor (lb/ton) (b)	Conversion Factor (ton-hr/lb-yr) (c)	Emissions (ton/yr) (a x b x c)
Screening		<b>0.00074</b>	<b>1.095</b>	
Fines Screening		<b>0.0022</b>	<b>1.095</b>	
<b>Total PM<sub>10</sub> Emissions (ton/yr):</b>				

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**Table 3 - Emissions From Internal Combustion Engines Less Than 447 kW (600hp) While Burning Gasoline:**

To calculate the emissions from the engine, the horsepower rating of the engine listed in column (a) is multiplied by the emission and conversion factors listed in columns (b) and (c).

Equipment ID #	Pollutant	Horsepower (HP) (a)	Emission Factor (lb/HP-hr) (b)	Conversion Factor (ton-hr/lb-yr) (c)	Emissions (ton/yr) (a x b x c)
	PM <sub>10</sub>		0.000721	1.095	
	SO <sub>x</sub>		0.000591	1.095	
	NO <sub>x</sub>		0.011	1.095	
	VOC		0.022	1.095	14.43
	CO		0.00696	1.095	4.56

**Table 4 – Emissions From Internal Combustion Engines Less Than 447 kW (600hp) While Burning Diesel Fuel:**

To calculate the emissions from the engine, the horsepower rating of the engine listed in column (a) is multiplied by the emission and conversion factors listed in columns (b) and (c).

Equipment ID #	Pollutant	Horsepower (HP) (a)	Emission Factor (lb/HP-hr) (b)	Conversion Factor (ton-hr/lb-yr) (c)	Emissions (ton/yr) (a x b x c)
	PM <sub>10</sub>	599	0.0022	1.095	1.443
	SO <sub>x</sub>	599	0.00205	1.095	1.345
	NO <sub>x</sub>	599	0.031	1.095	20.333
	VOC	599	0.0025	1.095	1.640
	CO	599	0.00668	1.095	4.381

**Table 5: – Emissions From Internal Combustion Engines Greater Than 447 kW (600hp) While Burning Diesel Fuel:**

To calculate the emissions from the engine, the horsepower rating of the engine listed in column (a) is multiplied by the emission and conversion factors listed in columns (b) and (c).

Equipment ID #	Pollutant	Horsepower (HP) (a)	Emission Factor (lb/HP-hr) (b)	Conversion Factor (ton-hr/lb-yr) (c)	Emissions (ton/yr) (a x b x c)
	PM <sub>10</sub>	601	0.0007	1.095	0.461
	SO <sub>x</sub>	601	0.0081 x S*	1.095	0.267
	NO <sub>x</sub>	601	0.024	1.095	15.794
	VOC	601	0.00071	1.095	0.4665
	CO	601	0.0055	1.095	3.620

\* "S" is the sulfur content of the fuel in weight percent. For example, if the sulfur content is 0.5%, then S = 0.5, On the Table above the HP is assumed to be 600 Hp to calculate the annual emissions from the engine.

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**8. Required attachments:**

- a. Please attach a copy of manufacturer's specifications for the unit(s) and any other appropriate supporting documentation. Please ensure that engine specifications are included in addition to crusher/screen specifications.
- b. Deviations from the submitted information, plans, and specifications are not permissible without securing the formal approval of District Department of the Environment, Air Quality Division, Permitting Branch.
- c. Please attach a list of all other stationary equipment installed at the site with potential emissions of PM<sub>10</sub> or NO<sub>x</sub> with their potential emissions of these pollutants.
- d. The complete application and applicable supporting document must be submitted to the following address:

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

**9. Compliance Certification:**

THE UNDERSIGNED HEREBY MAKES APPLICATION FOR COVERAGE BY THE ATTACHED SOURCE CATEGORY PERMIT.

THE UNDERSIGNED CERTIFIES THAT THE STATEMENTS CONTAINED WITHIN THIS APPLICATION ARE TRUE AND CORRECT, AND FURTHER CERTIFIES THAT ALL ATTACHED INFORMATION AND PREVIOUSLY SUBMITTED INFORMATION REFERENCED IN THIS APPLICATION REMAINS TRUE, CORRECT AND CURRENT, TO THE BEST OF HIS/HER KNOWLEDGE.

BY AFFIXING HIS/HER SIGNATURE HERETO HE/SHE FURTHER CERTIFIES THAT HE/SHE IS AUTHORIZED TO EXECUTE THIS APPLICATION.

AUTHORIZED SIGNATURE:

Owner/Responsible Official Signature

Print Name & Title

Date

**Attachment 1**

**Source Category Permit to Construct and Operate  
Temporary Portable Crusher or Screener Equipment**

Permit No. 6886-SC

**GOVERNMENT OF THE DISTRICT OF COLUMBIA**

**District Department of the Environment**



Air Quality Division

**Source Category Permit to Construct and Operate  
Temporary Portable Crusher or Screener Equipment**

Permit No. 6886-SC

October 1, 2014

I. Applicability:

- a. This source category permit is applicable to applicants wishing to construct and operate temporary portable crusher/screen equipment at sites in the District of Columbia who submit an application to the District Department of the Environment (“DDOE” or “the Department”), Air Quality Division (“AQD”) and are approved for coverage under this permit, either actively or by passive approval which will occur 30 days after submission of the complete application to AQD unless AQD objects to the approval in writing in that timeframe .
- b. The subject equipment will not operate at the site for more than six (6) months.
- c. The equipment will process nonmetallic minerals only.
- d. The equipment will operate for less than 12 hours per day.
- e. Dust from the equipment will be controlled with wet suppression (i.e. water sprays) whenever it is in operation.
- f. The equipment’s potential to emit (PTE) coarse particulate matter (PM<sub>10</sub>), in combination with any other stationary equipment installed at the site during the operation period, is less than 25 tons per year (TPY).
- g. The equipment’s PTE oxides of nitrogen (NO<sub>x</sub>), in combination with any other stationary equipment installed at the site during the operation period, is less than 25 TPY.
- h. The engine will be fired by ultra low sulfur diesel fuel or gasoline only.

II. General Requirements:

- a. The approved crushing/screen equipment shall be constructed and operated in accordance with all applicable air pollution control requirements of 20 DCMR.



**Source Category Permit No. 6886-SC to Construct and Operate a Temporary Portable Concrete Crusher or Screener**

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- b. This permit to construct and operate a temporary portable concrete crusher/screen for a specific project at a specific address is valid for up to six (6) months only.
- c. This permit expires on September 30, 2019 (20 DCMR 200.4). If an applicant covered by this permit wishes to continue operation after this date (and has not yet met the six month operating limit in Condition I(b)), the owner or operator shall submit an application for renewal by June 30, 2019.
- d. Construction or operation of equipment under the authority of this permit shall be considered acceptance of its terms and conditions.
- e. The Permittee shall allow authorized officials of the District, upon presentation of identification, to:
  - 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. Sample or monitor, at reasonable times, any substance or parameter for the purpose of assuring compliance with this permit or any applicable requirement.
- f. A copy of this permit shall be kept on the premises and produced upon request.
- g. Failure to comply with the provisions of this permit may be grounds for suspension or revocation. [20 DCMR 202.2]

**III. Emission Limitations:**

- a. Emissions of dust shall be minimized in accordance with the requirements of 20 DCMR 605 and the "Operational Limitations" of this permit.
- b. The emission of fugitive dust from any material handling, screening, crushing, grinding, conveying, mixing, or other industrial-type operation or process is prohibited. [20 DCMR 605.2]
- c. Emissions from the engine powering the crusher/screen shall not exceed those achieved by proper operation of the equipment in accordance with manufacturer's specifications.

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- d. Visible emissions shall not be emitted into the outdoor atmosphere from stationary sources; provided, that the 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 the equipment. [20 DCMR 606.1]
- e. Emissions from grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations shall not exceed 7% opacity. Emissions from crushers shall not exceed 12% opacity. [40 CFR 60, Subpart OOO, Table 3]
- f. 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]
- g. Emissions of PM<sub>10</sub> from all sources at the site shall not exceed 25 tons during the duration of operations of the unit at the site.
- h. Emissions of NO<sub>x</sub> from all sources at the site shall not exceed 25 tons during the duration of operations of the unit at the site.

**IV. Operational Limitations:**

- a. The crusher/screen shall be operated for a maximum of one (1) shift [twelve (12) hours] per day and seven (7) days per week for the duration of this operation period at the site [up to six months, per Condition II(b)]. [20 DCMR 201]
- b. Dust from the crusher/screener shall be controlled with wet suppression (water sprays) whenever the equipment is in operation, unless the material being crushed or screened is already sufficiently wet to ensure compliance with Condition III(b). [20 DCMR 201]
- c. The Permittee shall take reasonable precautions to minimize the emission of any fugitive dust into the outdoor atmosphere. These reasonable precautions shall include, but not be limited to the following [20 DCMR 605.1]:
  - 1. In the case of unpaved roads, unpaved roadways, and unpaved parking lots:
    - i. Use of clean 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 (use of binders or other chemicals may only be used with prior approval of the Department); and

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- 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.
  2. 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 curbside gutters, through reasonably prompt repair of pavement, or through any other means;
  3. 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;
  4. 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;
  5. In the case of demolition of buildings or structures: Use, to the extent possible, of water;
  6. 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;
  7. In the case of stockpiles of dusty material: Thorough wetting of the material before loading onto the stockpile and keeping the stockpile wetted, covered, or otherwise in a non-dusty condition.
- d. In order to comply with Condition IV(b) and (c), the Permittee shall:
  1. Provide clean water (free from salt, oil, etc.) for use at the site;
  2. Provide water spraying equipment that can access the entire work area;
  3. Apply water sprays without creating a nuisance or ponding and preventing movement of spray beyond site boundary.

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4. Restrict operation at the site to processing only concrete and related demolition materials from the demolished building.
- e. The importation of off-site materials for processing is prohibited, unless such material is needed to supplement the onsite materials for use in the restoration of the site, and provided the materials meet requirements per the Soil Erosion & Sedimentation Act. [20 DCMR 201]
- f. The crusher/screen shall be fired only on either gasoline or diesel fuel with a maximum sulfur content of 15 ppm (0.0015% by weight) and either a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent. [20 DCMR 201]
- g. The crusher/screen shall be operated and maintained in accordance with the recommendations of the equipment manufacturer. [20 DCMR 201]
- h. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the 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 606.3 and 40 CFR 60.11(d)]

**V. Monitoring and Testing Requirements:**

- a. The Permittee shall monitor the operating hours of the crusher/screener with the use of a non-resettable hour meter installed on the unit.
- b. The Permittee shall, during all work operations at the site, monitor to ensure that the operational requirements of Conditions IV(b) through IV(h) of this permit are met.
- c. If visible emissions of fugitive dust or smoke are observed in excess of the limits specified in Conditions III(b), (c), 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.
- d. The Permittee shall perform monthly periodic inspections to check that water is flowing to the discharge spray nozzles in the wet suppression system. The Permittee must initiate corrective action within 24 hours and complete corrective action as expeditiously as practical if the Permittee finds that water is not flowing properly during an inspection of the water spray nozzles. [40 CFR 60.674(b)]
- e. If the unit will be on site for 60 or more days after the first day of operation, the Permittee shall have performed a visible emissions test using the procedures set forth in 40 CFR 60,

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Appendix A-4, Method 9 to determine compliance with Conditions II(b), (d), and (e). This test program shall be consistent with the requirements of 40 CFR 60.11 and 40 CFR 60.675 including the following [See 40 CFR 60.675 for more details on allowable procedures]:

1. The minimum distance between the observer and the emission source shall be 15 feet;
  2. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g. road dust). The required observer position relative to the sun (40 CFR 60, Appendix A-4, Method 9, Section 2.1) must be followed;
  3. For affected facilities using wet suppression for particulate matter control (as required in this permit), a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible; and
  4. The duration of the Method 9 observations must be 30 minutes (five 6-minute averages). Compliance with the applicable fugitive emission limits in Condition III(e) must be based on the average of the five 6-minute averages.
- f. If visible emissions testing is required pursuant to Condition V(e), the Permittee shall submit the proposed testing plan to the following address at least 14 calendar days before the testing is to be performed:

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

**VI. Record Keeping Requirements:**

The Permittee shall maintain the following records for a period of three years and shall make them available to the Department or the U.S. EPA upon request.

- a. The Permittee shall keep a log of the hours of operation of the crusher/screener at the site. This shall be kept by recording the number of hours shown on the non-resettable hour meter on the unit at the beginning and end of each work day.

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- b. The Permittee shall keep a record of the quantity and type of any materials imported from offsite, along with an explanation of why such material was imported, so as to show compliance with Condition IV(e).
- c. The Permittee shall keep a record of all identified exceedances of the standards/limits set forth in this permit and the actions taken to correct the identified problems.
- d. The Permittee shall maintain a record of all maintenance performed on the unit to document compliance with Condition IV(g).
- e. The Permittee shall maintain a copy of the crusher's manufacturer's maintenance and operating recommendations and make such available to Department inspectors upon request.
- f. For each delivery of diesel fuel or gasoline, the Permittee shall maintain records of the date, fuel type, and amount of the delivery, as well as sufficient documentation to show that, for diesel fuel, the fuel met the standards set forth in Condition IV(f).
- g. The Permittee shall record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken in a logbook (written or electronic) at the facility. [40 CFR 60.674(b) and 40 CFR 60.676(b)(1)]
- h. The Permittee shall maintain the records of the results of any testing required pursuant to Condition V(e).

**VII. Reporting Requirements:**

- a. Within 30 days following completion of any testing required under Condition V(e), the Permittee shall submit the results, along with copies of all raw data collected, to the following address:

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

- b. The Permittee shall submit a letter to the following address upon completion of work at the site indicating that work has been completed and that the permit is no longer necessary.

District Department of the Environment  
Air Quality Division  
Attn: Chief, Permitting Branch

**Source Category Permit No. 6886-SC to Construct and Operate a Temporary Portable Concrete Crusher or Screener**

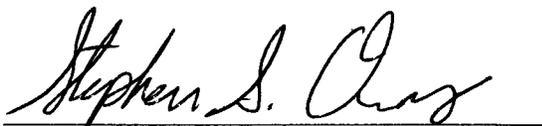
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1200 First Street, NE  
5<sup>th</sup> Floor  
Washington, DC 20002

- c. As part of the letter submitted pursuant to Condition VII(a), the Permittee shall certify that the operations performed under the authority of this permit complied with the conditions of this permit. If substantial deviations occurred, these shall be listed in the letter as exceptions to the certification of compliance.

Approved by:



Stephen S. Ours, P.E.  
Chief, Permitting Branch

10/1/2014

Date

SSO:ATH

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GOVERNMENT OF THE DISTRICT OF COLUMBIA

District Department of the Environment



Air Quality Division

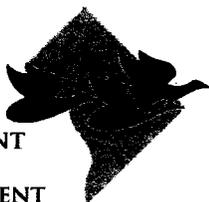
**APPLICATION FOR SOURCE CATEGORY PERMIT TO CONSTRUCT AND OPERATE TEMPORARY PORTABLE CRUSHER/SCREEN EQUIPMENT**

*Instructions: Please complete a separate copy of this form for each crusher, crusher/screen combination unit, and stand-alone screen associated with this project.*

**1. Applicability** (Check all that are applicable)

- The equipment consists a crusher or screen or combination unit.
- The equipment is portable.
- Operation of the equipment at the site is temporary and will not exceed six (6) months.
- The equipment processes nonmetallic minerals only.
- This equipment will operate for less than 12 hours per day.
- Dust from the equipment will be controlled with wet suppression (i.e. water sprays) whenever it is in operation.
- The equipment's potential to emit (PTE) coarse particulate matter (PM<sub>10</sub>) is less than 25 tons per year (TPY). See tables 1-5 to calculate PTE and sum PM<sub>10</sub> emissions from all tables. *Note that if there is other stationary equipment installed at the site emitting PM<sub>10</sub>, this application will not be approved if all equipment combined has a PTE of PM<sub>10</sub> exceeding this level.*
- The equipment's PTE oxides of nitrogen (NO<sub>x</sub>) is less than 25 TPY. See tables 1-5 to calculate PTE and sum NO<sub>x</sub> emissions from all tables. *Note that if there is other stationary equipment installed at the site emitting NO<sub>x</sub>, this application will not be approved if all equipment combined has a PTE of NO<sub>x</sub> exceeding this level.*
- The sulfur content of the fuel used, if diesel, will not exceed 15 parts per million (0.0015% by weight).

If you have checked all items above, you are eligible for coverage under this source category permit. Please complete the remainder of this form.



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TEMPORARY PORTABLE CRUSHER/SCREENER EQUIPMENT**

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If you are not eligible, you may still be eligible for a standard source-specific permit. Please contact the Air Quality Division at (202) 535-2250 to discuss alternate permitting options.

If you have questions about your eligibility or how to complete this application, please contact the Air Quality Division at (202) 535-2250.

**2. Equipment Owner or Operator Information (Permit Applicant)**

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Full Legal Name of Applicant/Organization

---

Name of Owner(s) or Principal Partner(s) of Above Organization

---

Mailing Address of Owner(s) or Principal (No., Street, City, State, Zip)

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Equipment Location Address

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Name of Owner/Responsible Official, Phone Number, and Email Address

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Site Contact Person, Phone Number, and Email Address (if different from above)

**3. Job Description:**

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**4. Estimated tonnage to be crushed/screened:** \_\_\_\_\_

**5. Operating Schedule:**

Planned project start date: \_\_\_\_\_ Planned project end date: \_\_\_\_\_

Max. hours/day: \_\_\_\_\_ Max. days/week: \_\_\_\_\_ Max. total days: \_\_\_\_\_

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**6. Equipment Information:**

**Crusher or Screen**

Crusher	Screen	Manufacturer/Model	Serial No.	Capacity (tons/hr)
<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____

**Engine**

Manufacturer/Model	Serial No.	Horsepower (HP)	Diesel	Gasoline	Fuel (Gal./hr)
_____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	_____

**7. Calculating Emissions:**

**Table 1: PM<sub>10</sub> Emissions From a Crusher:**

To calculate the emissions from a crusher, the maximum throughput rate of the crusher listed in column (a) is multiplied by the emission and conversion factors listed in columns (b) and (c).

Equipment ID #	Maximum Throughput Rate (ton/hr) (a)	Emission Factor (lb/ton) (b)	Conversion Factor (ton-hr/lb-yr) (c)	Emissions (ton/yr) (a x b x c)
		<b>0.00054</b>	<b>1.095</b>	

**Table 2: PM<sub>10</sub> Emissions From a Screen:**

To calculate the emissions from a screen, the maximum throughput rate of the screen listed in column (a) is multiplied by the emission and conversion factors listed in columns (b) and (c).

Operation	Maximum Throughput Rate (ton/hr) (a)	Emission Factor (lb/ton) (b)	Conversion Factor (ton-hr/lb-yr) (c)	Emissions (ton/yr) (a x b x c)
Screening		<b>0.00074</b>	<b>1.095</b>	
Fines Screening		<b>0.0022</b>	<b>1.095</b>	
<b>Total PM<sub>10</sub> Emissions (ton/yr):</b>				

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**Table 3 - Emissions From Internal Combustion Engines Less Than 447 kW (600hp) While Burning Gasoline:**

To calculate the emissions from the engine, the horsepower rating of the engine listed in column (a) is multiplied by the emission and conversion factors listed in columns (b) and (c).

Equipment ID #	Pollutant	Horsepower (HP) (a)	Emission Factor (lb/HP-hr) (b)	Conversion Factor (ton-hr/lb-yr) (c)	Emissions (ton/yr) (a x b x c)
	PM <sub>10</sub>		0.000721	1.095	
	SO <sub>x</sub>		0.000591	1.095	
	NO <sub>x</sub>		0.011	1.095	
	VOC		0.022	1.095	14.43
	CO		0.00696	1.095	4.56

**Table 4 – Emissions From Internal Combustion Engines Less Than 447 kW (600hp) While Burning Diesel Fuel:**

To calculate the emissions from the engine, the horsepower rating of the engine listed in column (a) is multiplied by the emission and conversion factors listed in columns (b) and (c).

Equipment ID #	Pollutant	Horsepower (HP) (a)	Emission Factor (lb/HP-hr) (b)	Conversion Factor (ton-hr/lb-yr) (c)	Emissions (ton/yr) (a x b x c)
	PM <sub>10</sub>	599	0.0022	1.095	1.443
	SO <sub>x</sub>	599	0.00205	1.095	1.345
	NO <sub>x</sub>	599	0.031	1.095	20.333
	VOC	599	0.0025	1.095	1.640
	CO	599	0.00668	1.095	4.381

**Table 5: – Emissions From Internal Combustion Engines Greater Than 447 kW (600hp) While Burning Diesel Fuel:**

To calculate the emissions from the engine, the horsepower rating of the engine listed in column (a) is multiplied by the emission and conversion factors listed in columns (b) and (c).

Equipment ID #	Pollutant	Horsepower (HP) (a)	Emission Factor (lb/HP-hr) (b)	Conversion Factor (ton-hr/lb-yr) (c)	Emissions (ton/yr) (a x b x c)
	PM <sub>10</sub>	601	0.0007	1.095	0.461
	SO <sub>x</sub>	601	0.0081 x S*	1.095	0.267
	NO <sub>x</sub>	601	0.024	1.095	15.794
	VOC	601	0.00071	1.095	0.4665
	CO	601	0.0055	1.095	3.620

\* "S" is the sulfur content of the fuel in weight percent. For example, if the sulfur content is 0.5%, then S = 0.5. On the Table above the HP is assumed to be 600 Hp to calculate the annual emissions from the engine.

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**8. Required attachments:**

- a. Please attach a copy of manufacturer's specifications for the unit(s) and any other appropriate supporting documentation. Please ensure that engine specifications are included in addition to crusher/screen specifications.
- b. Deviations from the submitted information, plans, and specifications are not permissible without securing the formal approval of District Department of the Environment, Air Quality Division, Permitting Branch.
- c. Please attach a list of all other stationary equipment installed at the site with potential emissions of PM<sub>10</sub> or NO<sub>x</sub> with their potential emissions of these pollutants.
- d. The complete application and applicable supporting document must be submitted to the following address:

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

**9. Compliance Certification:**

THE UNDERSIGNED HEREBY MAKES APPLICATION FOR COVERAGE BY THE ATTACHED SOURCE CATEGORY PERMIT.

THE UNDERSIGNED CERTIFIES THAT THE STATEMENTS CONTAINED WITHIN THIS APPLICATION ARE TRUE AND CORRECT, AND FURTHER CERTIFIES THAT ALL ATTACHED INFORMATION AND PREVIOUSLY SUBMITTED INFORMATION REFERENCED IN THIS APPLICATION REMAINS TRUE, CORRECT AND CURRENT, TO THE BEST OF HIS/HER KNOWLEDGE.

BY AFFIXING HIS/HER SIGNATURE HERETO HE/SHE FURTHER CERTIFIES THAT HE/SHE IS AUTHORIZED TO EXECUTE THIS APPLICATION.

AUTHORIZED SIGNATURE:

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Owner/Responsible Official Signature      Print Name & Title      Date

## **Attachment 1**

### **Source Category Permit to Construct and Operate Temporary Portable Crusher or Screener Equipment**

Permit No. 6886-SC

GOVERNMENT OF THE DISTRICT OF COLUMBIA

District Department of the Environment



Air Quality Division

**Source Category Permit to Construct and Operate  
Temporary Portable Crusher or Screener Equipment**

Permit No. 6886-SC

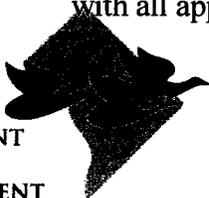
October 1, 2014

I. Applicability:

- a. This source category permit is applicable to applicants wishing to construct and operate temporary portable crusher/screen equipment at sites in the District of Columbia who submit an application to the District Department of the Environment (“DDOE” or “the Department”), Air Quality Division (“AQD”) and are approved for coverage under this permit, either actively or by passive approval which will occur 30 days after submission of the complete application to AQD unless AQD objects to the approval in writing in that timeframe .
- b. The subject equipment will not operate at the site for more than six (6) months.
- c. The equipment will process nonmetallic minerals only.
- d. The equipment will operate for less than 12 hours per day.
- e. Dust from the equipment will be controlled with wet suppression (i.e. water sprays) whenever it is in operation.
- f. The equipment’s potential to emit (PTE) coarse particulate matter (PM<sub>10</sub>), in combination with any other stationary equipment installed at the site during the operation period, is less than 25 tons per year (TPY).
- g. The equipment’s PTE oxides of nitrogen (NO<sub>x</sub>), in combination with any other stationary equipment installed at the site during the operation period, is less than 25 TPY.
- h. The engine will be fired by ultra low sulfur diesel fuel or gasoline only.

II. General Requirements:

- a. The approved crushing/screen equipment shall be constructed and operated in accordance with all applicable air pollution control requirements of 20 DCMR.



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- b. This permit to construct and operate a temporary portable concrete crusher/screen for a specific project at a specific address is valid for up to six (6) months only.
- c. This permit expires on September 30, 2019 (20 DCMR 200.4). If an applicant covered by this permit wishes to continue operation after this date (and has not yet met the six month operating limit in Condition I(b)), the owner or operator shall submit an application for renewal by June 30, 2019.
- d. Construction or operation of equipment under the authority of this permit shall be considered acceptance of its terms and conditions.
- e. The Permittee shall allow authorized officials of the District, upon presentation of identification, to:
  - 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. Sample or monitor, at reasonable times, any substance or parameter for the purpose of assuring compliance with this permit or any applicable requirement.
- f. A copy of this permit shall be kept on the premises and produced upon request.
- g. Failure to comply with the provisions of this permit may be grounds for suspension or revocation. [20 DCMR 202.2]

**III. Emission Limitations:**

- a. Emissions of dust shall be minimized in accordance with the requirements of 20 DCMR 605 and the "Operational Limitations" of this permit.
- b. The emission of fugitive dust from any material handling, screening, crushing, grinding, conveying, mixing, or other industrial-type operation or process is prohibited. [20 DCMR 605.2]
- c. Emissions from the engine powering the crusher/screen shall not exceed those achieved by proper operation of the equipment in accordance with manufacturer's specifications.

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- d. Visible emissions shall not be emitted into the outdoor atmosphere from stationary sources; provided, that the 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 the equipment. [20 DCMR 606.1]
- e. Emissions from grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations shall not exceed 7% opacity. Emissions from crushers shall not exceed 12% opacity. [40 CFR 60, Subpart OOO, Table 3]
- f. 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]
- g. Emissions of PM<sub>10</sub> from all sources at the site shall not exceed 25 tons during the duration of operations of the unit at the site.
- h. Emissions of NO<sub>x</sub> from all sources at the site shall not exceed 25 tons during the duration of operations of the unit at the site.

**IV. Operational Limitations:**

- a. The crusher/screen shall be operated for a maximum of one (1) shift [twelve (12) hours] per day and seven (7) days per week for the duration of this operation period at the site [up to six months, per Condition II(b)]. [20 DCMR 201]
- b. Dust from the crusher/screener shall be controlled with wet suppression (water sprays) whenever the equipment is in operation, unless the material being crushed or screened is already sufficiently wet to ensure compliance with Condition III(b). [20 DCMR 201]
- c. The Permittee shall take reasonable precautions to minimize the emission of any fugitive dust into the outdoor atmosphere. These reasonable precautions shall include, but not be limited to the following [20 DCMR 605.1]:
  - 1. In the case of unpaved roads, unpaved roadways, and unpaved parking lots:
    - i. Use of clean 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 (use of binders or other chemicals may only be used with prior approval of the Department); and

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- 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.
  2. 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 curbside gutters, through reasonably prompt repair of pavement, or through any other means;
  3. 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;
  4. 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;
  5. In the case of demolition of buildings or structures: Use, to the extent possible, of water;
  6. 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;
  7. In the case of stockpiles of dusty material: Thorough wetting of the material before loading onto the stockpile and keeping the stockpile wetted, covered, or otherwise in a non-dusty condition.
- d. In order to comply with Condition IV(b) and (c), the Permittee shall:
1. Provide clean water (free from salt, oil, etc.) for use at the site;
  2. Provide water spraying equipment that can access the entire work area;
  3. Apply water sprays without creating a nuisance or ponding and preventing movement of spray beyond site boundary.

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4. Restrict operation at the site to processing only concrete and related demolition materials from the demolished building.
- e. The importation of off-site materials for processing is prohibited, unless such material is needed to supplement the onsite materials for use in the restoration of the site, and provided the materials meet requirements per the Soil Erosion & Sedimentation Act. [20 DCMR 201]
- f. The crusher/screen shall be fired only on either gasoline or diesel fuel with a maximum sulfur content of 15 ppm (0.0015% by weight) and either a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent. [20 DCMR 201]
- g. The crusher/screen shall be operated and maintained in accordance with the recommendations of the equipment manufacturer. [20 DCMR 201]
- h. At all times, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the 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 606.3 and 40 CFR 60.11(d)]

**V. Monitoring and Testing Requirements:**

- a. The Permittee shall monitor the operating hours of the crusher/screener with the use of a non-resettable hour meter installed on the unit.
- b. The Permittee shall, during all work operations at the site, monitor to ensure that the operational requirements of Conditions IV(b) through IV(h) of this permit are met.
- c. If visible emissions of fugitive dust or smoke are observed in excess of the limits specified in Conditions III(b), (c), 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.
- d. The Permittee shall perform monthly periodic inspections to check that water is flowing to the discharge spray nozzles in the wet suppression system. The Permittee must initiate corrective action within 24 hours and complete corrective action as expeditiously as practical if the Permittee finds that water is not flowing properly during an inspection of the water spray nozzles. [40 CFR 60.674(b)]
- e. If the unit will be on site for 60 or more days after the first day of operation, the Permittee shall have performed a visible emissions test using the procedures set forth in 40 CFR 60,

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Appendix A-4, Method 9 to determine compliance with Conditions II(b), (d), and (e). This test program shall be consistent with the requirements of 40 CFR 60.11 and 40 CFR 60.675 including the following [See 40 CFR 60.675 for more details on allowable procedures]:

1. The minimum distance between the observer and the emission source shall be 15 feet;
  2. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g. road dust). The required observer position relative to the sun (40 CFR 60, Appendix A-4, Method 9, Section 2.1) must be followed;
  3. For affected facilities using wet suppression for particulate matter control (as required in this permit), a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible; and
  4. The duration of the Method 9 observations must be 30 minutes (five 6-minute averages). Compliance with the applicable fugitive emission limits in Condition III(e) must be based on the average of the five 6-minute averages.
- f. If visible emissions testing is required pursuant to Condition V(e), the Permittee shall submit the proposed testing plan to the following address at least 14 calendar days before the testing is to be performed:

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

**VI. Record Keeping Requirements:**

The Permittee shall maintain the following records for a period of three years and shall make them available to the Department or the U.S. EPA upon request.

- a. The Permittee shall keep a log of the hours of operation of the crusher/screener at the site. This shall be kept by recording the number of hours shown on the non-resettable hour meter on the unit at the beginning and end of each work day.

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- b. The Permittee shall keep a record of the quantity and type of any materials imported from offsite, along with an explanation of why such material was imported, so as to show compliance with Condition IV(e).
- c. The Permittee shall keep a record of all identified exceedances of the standards/limits set forth in this permit and the actions taken to correct the identified problems.
- d. The Permittee shall maintain a record of all maintenance performed on the unit to document compliance with Condition IV(g).
- e. The Permittee shall maintain a copy of the crusher's manufacturer's maintenance and operating recommendations and make such available to Department inspectors upon request.
- f. For each delivery of diesel fuel or gasoline, the Permittee shall maintain records of the date, fuel type, and amount of the delivery, as well as sufficient documentation to show that, for diesel fuel, the fuel met the standards set forth in Condition IV(f).
- g. The Permittee shall record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken in a logbook (written or electronic) at the facility. [40 CFR 60.674(b) and 40 CFR 60.676(b)(1)]
- h. The Permittee shall maintain the records of the results of any testing required pursuant to Condition V(e).

**VII. Reporting Requirements:**

- a. Within 30 days following completion of any testing required under Condition V(e), the Permittee shall submit the results, along with copies of all raw data collected, to the following address:

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

- b. The Permittee shall submit a letter to the following address upon completion of work at the site indicating that work has been completed and that the permit is no longer necessary.

District Department of the Environment  
Air Quality Division  
Attn: Chief, Permitting Branch

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1200 First Street, NE  
5<sup>th</sup> Floor  
Washington, DC 20002

- c. As part of the letter submitted pursuant to Condition VII(a), the Permittee shall certify that the operations performed under the authority of this permit complied with the conditions of this permit. If substantial deviations occurred, these shall be listed in the letter as exceptions to the certification of compliance.

Approved by:



Stephen S. Ours, P.E.  
Chief, Permitting Branch

10/1/2014

Date

SSO:ATH

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