GENERAL PERMIT TO OPERATE AND/OR CONSTRUCT
(As required by Title 49, Chapter 3, Article 2, Section 49 – 480, Arizona Revised Statutes and Maricopa County Air Pollution Control Regulations)

for

FACILITIES OPERATING STATIONARY EMERGENCY INTERNAL COMBUSTION ENGINES

This general permit to operate and/or construct does not relieve the applicant of the responsibility of meeting all air pollution regulations.

EXPIRATION DATE: 4/10/2021
REVISION DATE: 4/11/2016
ISSUANCE DATE: 4/11/2011

Philip Mcneeley, Director, Maricopa County Air Quality Department
General Permit to Operate and/or Construct
A Facility Operating Stationary Emergency Internal Combustion Engines

Table of Contents

SECTION 1 Authority .................................................................................................................. Page 1

SECTION 2 Definitions ................................................................................................................ Page 1

SECTION 3 Authority Under this General Permit ................................................................. Page 3
A. Authority to Operate (ATO) or Construct .................................................................. Page 3
B. Effective Date and Expiration Date of Authorization ............................................... Page 3
C. Requirements to File an Application for an Individual Source Permit .................. Page 3
D. Issuance of an Individual Source Permit .................................................................. Page 3

SECTION 4 General Requirements ......................................................................................... Page 4
A. Compliance Required .............................................................................................. Page 4
B. Duty to Provide Information ................................................................................... Page 4
C. Emergency Provisions ............................................................................................. Page 4
D. Facility Changes Requiring an Individual Source Permit .................................... Page 5
E. Facility Changes Allowed ......................................................................................... Page 5
F. Filing of an Application for an ATO .......................................................................... Page 6
G. Pay Applicable Fees ............................................................................................... Page 6
H. Posting of a Permit .................................................................................................. Page 6
I. Property Rights ......................................................................................................... Page 6
J. Right to Entry and Inspection .................................................................................. Page 6
K. Severability ............................................................................................................... Page 7

SECTION 5 General Operating Requirements ....................................................................... Page 7
A. Fuel Burning Equipment (Boilers and Hot Water Heaters) ..................................... Page 7
B. Stationary Internal Combustion Engines .................................................................. Page 7
C. Opacity Limitations .................................................................................................. Page 7
D. Fuel Requirements .................................................................................................. Page 8

SECTION 6 Requirements for Stationary ICE Subject to NSPS Subpart IIII .................... Page 8
A. Applicability .......................................................................................................... Page 8
B. Emission Standards ............................................................................................... Page 8
C. Compliance Demonstration ..................................................................................... Page 9
D. Fuel Standards ....................................................................................................... Page 10
E. Model Year 2008 and Later Stationary ICE Less Than 50 HP ............................. Page 10
F. Additional NSPS Subpart IIII Requirements .......................................................... Page 10

SECTION 7 Requirements for Stationary ICE Subject to NSPS Subpart JJJJJ .................... Page 11
A. Applicability .......................................................................................................... Page 11
B. Emission Standards ............................................................................................... Page 11
C. Fuel Requirements .................................................................................................. Page 12
D. Additional Requirements ........................................................................................ Page 12

SECTION 8 Requirements for Stationary ICE Subject to 40 CFR 63 Subpart ZZZZ .......... Page 13
A. Applicability .......................................................................................................... Page 13
B. Operating Requirements ........................................................................................ Page 13
C. Maintenance Schedule ............................................................................................ Page 13

SECTION 9 Odors and Gaseous Air Contaminants .............................................................. Page 14
A. Odor Control Requirements .................................................................................... Page 14
B. Compliance Demonstration .......................................................................................................................... Page 14

SECTION 10 Monitoring/Recordkeeping Requirements .................................................................................. Page 15
A. Emergency Provision Recordkeeping Requirements ............................................................................... Page 15
B. Logging Requirements for Facility Changes .......................................................................................... Page 15
C. Stationary Emergency ICE ..................................................................................................................... Page 15
D. Odors and Gaseous Air Contaminants .................................................................................................... Page 16
E. Non-Road Engines ....................................................................................................................................... Page 16
F. Records Retention Requirements ........................................................................................................... Page 16

SECTION 11 Reporting Requirements ............................................................................................................. Page 16
A. Certification of Truth, Accuracy, and Completeness ............................................................................... Page 16
B. Duty to Provide Information ................................................................................................................... Page 16
C. Deviations from Permit Requirements ..................................................................................................... Page 16
D. Deviations from Stationary ICE Maintenance Schedule ........................................................................ Page 17
E. Emergency Reporting .................................................................................................................................. Page 17
F. Emission Inventory ....................................................................................................................................... Page 17
G. Facility Change Reporting ....................................................................................................................... Page 17

SECTION 12 Fugitive Dust From Dust-Generating Operations .......................................................................... Page 17
A. Applicability .................................................................................................................................................. Page 17
B. Exemptions .................................................................................................................................................. Page 18
C. Dust Control Plan Requirement ................................................................................................................ Page 18
D. Visible Emission Requirements for Dust-Generating Operations .......................................................... Page 18
E. Exemptions From Dust-Generating Operation Opacity Limitation Requirement .................................. Page 18
F. Stabilization Requirements For Dust-Generating Operations ............................................................... Page 19
G. Control Measures For Dust-Generating Operations .............................................................................. Page 20
H. Trackout, Carry-Out, Spillage, and/or Erosion ....................................................................................... Page 23
I. Soil Moisture ................................................................................................................................................ Page 24
J. Dust Control Training Classes For Dust-Generating Operations ......................................................... Page 24
K. Dust Control Plan Revisions .................................................................................................................... Page 24
L. Recordkeeping .............................................................................................................................................. Page 25
M. Records Retention ....................................................................................................................................... Page 25
General Permit to Operate and/or Construct
A Facility Operating Stationary Emergency Internal Combustion Engines

SECTION 1: AUTHORITY

This General Permit is authorized by Rule 200 and Rule 230 of the Maricopa County Air Pollution Control Rules and Regulations (Rules) pursuant to Section 49-480.J of the Arizona Revised Statutes. In that the Arizona Department of Environmental Quality has not issued a general permit for facilities operating stationary emergency internal combustion engines in Maricopa County as defined herein, the Maricopa County Air Quality Department (Department) is authorized to issue this General Permit.

[County Rule 200] [County Rule 230] [A.R.S. § 49-480.J]

SECTION 2: DEFINITIONS

The following definitions shall apply to this permit:

Commercial Emergency Stationary RICE - an emergency stationary reciprocating ICE used in commercial establishments such as office buildings, hotels, stores, telecommunications facilities, restaurants, financial institutions such as banks, doctor's offices, and sports and performing arts facilities.

Compression Ignition (CI) - reciprocating internal combustion engine with operating characteristics wherein the principal mechanism of igniting the fuel and air mixture in the cylinders is the compression of air in the cylinder until it is so hot that any fuel injected into the air or mixed with the air ignites. In this type of engine, a separate ignition source, such as a spark plug, is not used.

Crankcase Emissions - substances emitted to the atmosphere from any part of an engine crankcase's ventilation or lubrication systems. The crankcase is the housing for the crankshaft and other related internal parts.

Defeat Device - an auxiliary emission-control device that reduces the effectiveness of emission controls for an engine under conditions that the engine may reasonably be expected to encounter during normal operation and use.

Department - The Maricopa County Air Quality Department.

Diesel Fuel - any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

Emergency Stationary Internal Combustion Engine (ICE) - Any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. Stationary ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

External Fuel Burning - a process involving the combustion of natural gas, propane or butane which does not include internal combustion engines, turbines, burn-off ovens, incinerators, crematories, or other equipment that requires a control device to comply with any requirements.

Fire Pump Engine - an emergency stationary ICE certified to NFPA requirements that is used to provide power to pump water for fire suppression or protection.

Gasoline - any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.
**Institutional Emergency Stationary RICE** - an emergency stationary reciprocating ICE used in institutional establishments such as medical centers, nursing homes, research centers, institutions of higher education, correctional facilities, elementary and secondary schools, libraries, religious establishments, police stations, and fire stations.

**Lean Burn Engine** - any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

**Liquefied Petroleum Gas (LPG)** - any liquefied hydrocarbon gas obtained as a by-product in petroleum refining or natural gas production.

**Maximum Engine Power** - maximum engine power as defined in 40 CFR 1039.140 for compression ignition engines and 40 CFR 1048.801 for spark ignition engines.

**Model Year** - Either of the following:
A. The calendar year in which the engine was originally produced, or
B. The annual new model production period of the engine manufacturer if it is different than the calendar year. This must include January 1 of the calendar year for which the model year is named. It may not begin before January 2nd of the previous calendar year and it must end by December 31st of the named calendar year. For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was originally produced.

**Modification** - any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted.

**Opacity** - A condition of the ambient air or any part thereof, in which an air contaminant partially or wholly obscures the view of an observer.

**Reconstruction** - with respect to engines, the replacement of components of an existing engine to such an extent that the fixed capital cost of the new components exceeds 50% of the fixed capital cost that would be required to construct a comparable entirely new engine.

**Residential emergency stationary RICE** - an emergency stationary reciprocating ICE used in residential establishments such as homes or apartment buildings.

**Responsible Official** - One of the following:
A. For a corporation: A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more operating facilities applying for or subject to a permit and the delegation of authority to such representatives is approved in advance by the Department;
B. For a partnership or sole proprietorship: A general partner or the proprietor respectively;
C. For a municipality or other public agency: Either a principal executive officer or ranking elected official.

**Rich Burn Engine** - any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to 6/12/06, with passive emission control technology for NOx (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2%

**Spark Ignition (SI)** - relating to either: a gasoline-fueled engine; or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.
Stationary Internal Combustion Engine - any ICE, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary ICE is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle or a vehicle used solely for competition.

[County Rules 100, 200, 230, and 300][SIP Rule 324] [40 CFR §§ 60.4205, 60.4219, 60.4248, 63.6675]

SECTION 3: AUTHORITY UNDER THIS GENERAL PERMIT

Any facility operating stationary emergency ICE shall be eligible for coverage under this General Permit if the facility meets the requirements as specified in Sections 5 of this Permit. However, if the facility does not meet the provisions of Permit Sections 5, the operation will be considered ineligible for coverage and the applicant may be required by the Control Officer to obtain an individual source permit.

A. AUTHORITY TO OPERATE (ATO) OR CONSTRUCT

A facility is not covered by this General Permit unless a complete application for an ATO is filed with the Control Officer.

[County Rule 230 §303.1]

B. EFFECTIVE DATE AND EXPIRATION DATE OF AUTHORIZATION

This General Permit shall be valid for five years after the date it is signed by the Control Officer. All ATOs issued under this General Permit expire on the same date that this General Permit expires, regardless of when the ATO was issued. Any activity covered by this General Permit is authorized at the specified facility on the date the application is filed. The Control Officer will provide written notice of the expiration of this General Permit stating that the source must reapply for coverage. The Permittee may operate under the terms of this General Permit until one of the following conditions takes place:

1) The date that the Permittee submits a complete application for coverage under an individual permit;
2) 180 days after receipt of the notice of expiration, termination or cancellation of this general permit;
3) The date the Permittee submits a complete application for coverage under a renewal of this general permit; or
4) The expiration date of this General Permit.

[County Rule 210 §§302.1.a, 302.1.h(3)][County Rule 230 §§302.4.a, 303.3, 306, 311.3]

C. REQUIREMENTS TO FILE AN APPLICATION FOR AN INDIVIDUAL SOURCE PERMIT

1) Denial of an ATO:
   If the Control Officer notifies the Permittee that the application for coverage under the General Permit is denied, the applicant must file an individual source permit application within 180 days of receipt of the denial notice.

   [County Rule 230 §303.3]

2) Revocation of an ATO:
   If an ATO has been issued and the Permittee is later notified by the Control Officer of the revocation of the authority to operate under this General Permit because of expiration, termination, or cancellation, the Permittee must file an application for an individual source permit. The application for an individual source permit must be filed within 180 days of receiving the notice from the Control Officer. The Permittee may continue to operate under this General Permit until the earlier of either:
   a) The date that it submits a complete application for an individual source permit, or
   b) The date 180 days after receipt of the notice of expiration, termination, or cancellation.

   [County Rule 230 §311]

D. ISSUANCE OF AN INDIVIDUAL SOURCE PERMIT

If the Control Officer issues an Individual Source Permit authorizing the same activity that is authorized by an ATO issued under this General Permit, the ATO shall become null and void on the date that the Individual Source Permit is issued.

[County Rule 230 §307]
SECTION 4: GENERAL REQUIREMENTS

A. COMPLIANCE REQUIRED

1) The Permittee shall comply with all conditions of this Permit including all applicable requirements of Arizona air quality statutes and the Rules. Compliance with permit terms and conditions does not relieve, modify, or otherwise affect the Permittee’s duty to comply with all applicable requirements of Arizona air quality statutes and the Rules. Any Permit non-compliance is grounds for enforcement action; for a permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. Non-compliance with any federally enforceable requirement in the Permit constitutes a violation of the Federal Clean Air Act.

[County Rule 210 §302.1.h(1)] [County Rule 230 §302.4.a]

2) The Permittee shall halt or reduce the permitted activity in order to maintain compliance with the applicable requirements of Federal laws, Arizona laws, the Rules, or other conditions of this Permit.

[County Rule 210 §302.1.h(2)] [County Rule 230 §302.4.a]

B. DUTY TO PROVIDE INFORMATION

1) The Permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control Officer may request in writing to determine whether cause exists for revoking the ATO, or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Control Officer copies of records required to be kept by the permit. For information claimed to be confidential, the Permittee shall furnish a copy of such records directly to the Administrator of the Federal EPA along with a claim of confidentiality if required to do so by the Control Officer.

[County Rule 210 §302.1.h(5)] [County Rule 230 §302.4.a]

2) If, while processing an application for an ATO, the Control Officer determines that additional information is necessary to evaluate or to take final action on that application, the Control Officer may request such information in writing and may set a reasonable deadline for a response. The Control Officer may, after one submittal by the applicant under County Rule 210, reject an application that is still determined to be incomplete and shall notify the applicant of the decision by certified mail.

[County Rule 210 §301.4.f]

3) If the Permittee has failed to submit any relevant facts or has submitted incorrect information in the application for an ATO, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

[County Rule 210 §301.6]

C. EMERGENCY PROVISIONS

NOTE: This condition is not applicable to standards and limitations that are promulgated under Section 111 (Standards of Performance for New Stationary Sources) of the Clean Air Act or Section 112 (National Emission Standards for Hazardous Air Pollutants) of the Act (in this permit, conditions based upon 40 CFR Part 60 are Section 111 requirements and those based 40 CFR Part 63 are Section 112 requirements).

1) For the purposes of this Permit, an emergency is defined as any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, that require immediate corrective action to restore normal operation, and that cause the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

[County Rule 130 §201]

2) An emergency constitutes an affirmative defense to an action brought for noncompliance with the technology-based emission limitations, if the requirements of Permit Section 10, Condition A are met.

[County Rule 130 §401]
3) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that contain the information listed in Permit Section 10, Condition A. [County Rule 130 §402]

4) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof. [County Rule 130 §403]

5) The provisions of this Permit Condition are in addition to any emergency or upset provision contained in any applicable requirement. [County Rule 130 §404]

D. FACILITY CHANGES REQUIRING AN INDIVIDUAL SOURCE PERMIT

The following changes may not be made under this General Permit:

1) A change that triggers a new applicable requirement or violates an existing applicable requirement;
2) A change that will require a case by case determination of an emissions limitation; nor
3) A change that will result in the burning of any fuel that is not currently authorized by this permit [County Rule 210 §405]

E. FACILITY CHANGES ALLOWED

1) Except for a physical change or change in the method of operation requiring the Permittee to obtain an individual source permit or a change subject to the logging or notice requirements of this Permit Condition, a change shall not be subject to the revision, notice, or logging requirements of these General Permit Conditions. [County Rule 220 §404.1]

2) Facility Changes Requiring Logging:
The following changes may be made if the Permittee keeps on-site records of the changes according to the logging requirements of Permit Section 10:

a) Changing process equipment so long as the source does not exceed any threshold listed in Sections 5 of this General Permit; or
b) Engaging in any new exempted activity listed in County Rule 200, Section 303.3.c, but not listed in the General Permit. [County Rule 220 §404.2.b and c]

3) Facility Changes Requiring Advance Notification:
The following changes may be made if the Permittee files the appropriate advance written notification in accordance with the requirements of Permit Section 11, Condition G:

a) The Permittee shall provide written notice to the Control Officer no less than 7 days before making a physical change or a change in the method of operation that increases actual emissions by more than 10% of the major source threshold for any conventional air pollutant. [County Rule 220 §404.3.b]

b) If the Permittee installs an emergency engine or makes any other change that would trigger an applicable requirement, the Permittee shall give advance notice to the Control Officer at least 30 days before the installation or change. [County Rule 220 §404.3.d]

c) A change where the fixed capital cost of components used for repairing an emergency engine is greater than 50% of the capital cost of comparable new equipment and the repairs happen over a 12 consecutive month period, the Permittee shall give the Control Officer at least 7 days advance notice. [County Rule 220 §404.3.e]
4) If a source change is described by both the logging and advanced notification sections of this Permit Condition, the Permittee shall comply with the advanced notification requirement.

[County Rule 220 §404.7]

5) If a source change is described by both the advanced notification and Facility Changes Requiring An Individual Source Permit sections of this Permit, the Permittee shall comply with the individual source permit requirement.

[County Rule 220 §404.8]

6) Notwithstanding any other Condition of this General Permit, the Control Officer may require the Permittee to obtain a new ATO or an individual permit for any change that, when considered together with any other changes submitted by the same facility under this Condition over a 5 year term, constitutes a change under County Rule 220, Section 403.2.

[County Rule 220 §404.6]

F. FILING OF AN APPLICATION FOR AN ATO:

1) Any facility that is eligible for this General Permit according to the requirements of this Permit Section may apply for an ATO by completing the necessary application forms that are approved by the Control Officer. The application shall be completed, all necessary information provided, and the ATO application shall be signed by the responsible official before the application may be processed.

[County Rule 230 §302.4]

2) A source applying for an ATO under this Permit shall not propose nor accept pursuant to County Rule 220 emission limitations, controls, or other requirements that are not included in this General Permit.

[County Rule 230 §302.5]

G. PAY APPLICABLE FEES
Sources applying for and operating under an ATO for this General Permit shall pay all fees to the Control Officer pursuant to County Rule 280.

[County Rule 280]

H. PERMIT POSTING
The Permittee shall post a copy of the ATO at the covered facility in such a manner as to be clearly visible. A complete copy of the General Permit and the original ATO shall be kept on the site during the life of the permit.

[County Rule 200 §312]

I. PROPERTY RIGHTS
This General Permit does not convey any property rights of any sort, or any exclusive privilege.

[County Rule 210 §302.1.h(4)] [County Rule 230 §§ 301, 302.4.a]

J. RIGHT TO ENTRY AND INSPECTION
For the purpose of assuring compliance with this General Permit, the Permittee shall allow the Control Officer or authorized representative, upon presentation of proper credentials to:

1) Enter upon the Permittee’s premises where the source is located or emissions-related activity is conducted, or where records are required to be kept pursuant to the conditions of this Permit;

2) Have access to and copy, at reasonable times, any records required to be kept under the terms and conditions of this General Permit;

3) Inspect any source, at reasonable times, equipment (including monitoring and air pollution control devices), practices or operations regulated or required in this General Permit;

4) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this General Permit or other applicable requirements; and

5) Record any inspection by use of written, electronic, magnetic, and photographic media.

[County Rule 210 §305.1.f]
K. SEVERABILITY

The provisions of this General Permit are severable and, if any provision of this General Permit is held invalid, the remainder of this General Permit shall remain valid.

[County Rule 210 §302.1.g] [County Rule 230 §302.4.a]

SECTION 5: GENERAL OPERATING REQUIREMENTS

A. FUEL BURNING EQUIPMENT (BOILERS AND HOT WATER HEATERS)

1) The Permittee shall only burn natural gas, propane, and butane as fuels in the fuel burning equipment. This requirement does not apply to emergency engines.

2) The maximum aggregated heat input rating for all fuel burning equipment (excluding internal combustion engines) at the facility as a whole shall be less than 10.0 million Btu/Hr.

3) The maximum aggregated heat input rating for propane and butane-fueled equipment shall not exceed 6.8 million Btu/hr, excluding emergency engines.

[County Rule 210 §302.1.b(1)] [County Rule 241 §302]

B. STATIONARY INTERNAL COMBUSTION ENGINES (ICE)

1) Only emergency ICE may construct or operate under this General Permit.

2) The total combined rating of all stationary ICE shall not exceed 2,500 brake horsepower (BHP).

   [County Rule 230 §301] [County Rule 220 §302.2] [County Rule 241 §302]

3) The Permittee shall limit the total hours of operation of each ICE to no more than 500 hours per any twelve consecutive months, including no more than 100 hours per calendar year for the purpose of maintenance checks and readiness testing.

   [County Rule 220 §302.2] [SIP Rule 324 §205] [40 CFR §§60.4211(f), 60.4243(d), 63.6640(f)(2)]

4) Stationary ICE shall not be used for peak shaving. Stationary ICE shall only be used for the following purposes:

   a) For power when normal power service fails from the serving utility or if onsite electrical transmission or onsite power generation equipment fails;

   b) Reliability-related activities such as engine readiness, calibration, or maintenance or to prevent the occurrence of an unsafe condition during electrical system maintenance as long as the total number of hours of the operation does not exceed 100 hours per calendar year per engine as evidenced by an installed non-resettable hour meter;

   c) Emergency pumping of water resulting from a flood, fire, lightning strikes, police action or for any other essential public services which affect the public health and safety;

   d) Lighting airport runways;

   e) Sewage overflow mitigation and/or prevention; or

   f) To operate standby emergency water pumps for fire control that activate when sensors detect low water pressure.

   [SIP Rule 324 §104] [40 CFR §§60.4211(f); 60.4243(d)] [40 CFR §63.6640(f)]

5) Each stationary ICE shall be equipped with a non-resettable hour meter.

   [County Rule 200 §309] [SIP Rule 324 §104] [40 CFR §§60.4209, 60.4237, 63.6625(f)]

C. OPACITY LIMITATIONS

Unless otherwise stated in this Permit, the Permittee shall not discharge into the ambient air from any single source of emissions any air contaminant, other than uncombined water, in excess of 20% opacity.

[County Rule 300 §501] [SIP Rule 324 §303]
D. FUEL REQUIREMENTS

The Permittee shall not burn any fuel containing more than 500 ppm sulfur in any ICE. Additional fuel requirements for compression ignition (CI) ICE subject NSPS Subpart IIII are specified in Section 6, Condition D. Additional fuel requirements for gasoline-fueled engines subject to NSPS Subpart JJJJ are specified in Section 7, Condition C.

[County Rule 320 §305] [County Rule 324 §301.1]

SECTION 6: REQUIREMENTS FOR STATIONARY ICE SUBJECT TO NSPS SUBPART IIII

A. APPLICABILITY

The following stationary ICE are subject to NSPS Subpart IIII: Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines

1) Any stationary CI ICE that is not a fire pump engine that was ordered after July 11, 2005 and manufactured after April 1, 2006.

2) Any CI fire pump engine ordered after July 11, 2005 and manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

3) Any stationary emergency CI ICE that was modified or reconstructed after July 11, 2005.

[40 CFR §60.4200(a)]

B. EMISSION STANDARDS

Stationary ICE shall comply with the EPA emission standards in Table 1 or Table 2, as applicable, for the same maximum engine power category and model year:

<table>
<thead>
<tr>
<th>Maximum Engine Power</th>
<th>Model Year</th>
<th>Nonroad Engine Emission Rating</th>
<th>NMHC + NOx</th>
<th>HC</th>
<th>NOx</th>
<th>CO</th>
<th>PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>KW&lt;8 (HP&lt;11)</td>
<td>Pre-2007</td>
<td>Tier 1</td>
<td>10.5 (7.8)</td>
<td>8.0</td>
<td>1.0 (0.75)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2007</td>
<td>Tier 2</td>
<td>7.5 (5.6)</td>
<td>8.0</td>
<td>0.80 (0.60)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2008+</td>
<td>Tier 4</td>
<td>7.5 (5.6)</td>
<td>8.0</td>
<td>0.40 (0.30)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8≤KW&lt;19 (11≤HP&lt;25)</td>
<td>Pre-2007</td>
<td>Tier 1</td>
<td>9.5 (7.1)</td>
<td>6.6</td>
<td>0.80 (0.60)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2007</td>
<td>Tier 2</td>
<td>7.5 (5.6)</td>
<td>6.6</td>
<td>0.80 (0.60)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2008+</td>
<td>Tier 4</td>
<td>7.5 (5.6)</td>
<td>6.6</td>
<td>0.40 (0.30)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19≤KW&lt;37 (25≤HP&lt;50)</td>
<td>Pre-2007</td>
<td>Tier 1</td>
<td>9.5 (7.1)</td>
<td>5.5</td>
<td>0.80 (0.60)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2007</td>
<td>Tier 2</td>
<td>7.5 (5.6)</td>
<td>5.5</td>
<td>0.60 (0.44)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2008+</td>
<td>Tier 4</td>
<td>7.5 (5.6)</td>
<td>5.5</td>
<td>0.30 (0.22)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37≤KW&lt;75 (50≤HP&lt;100)</td>
<td>Pre-2007</td>
<td>Tier 1</td>
<td>4.7 (3.5)</td>
<td>5.0</td>
<td>0.4 (0.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2007</td>
<td>Tier 2</td>
<td>7.5 (5.6)</td>
<td>5.0</td>
<td>0.4 (0.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2008+</td>
<td>Tier 3</td>
<td>4.7 (3.5)</td>
<td>5.0</td>
<td>0.4 (0.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>75≤KW&lt;130 (100≤HP&lt;175)</td>
<td>Pre-2007</td>
<td>Tier 1</td>
<td>9.2 (6.9)</td>
<td>5.0</td>
<td>0.30 (0.22)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2007+</td>
<td>Tier 3</td>
<td>4.0 (3.0)</td>
<td>5.0</td>
<td>0.30 (0.22)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>130≤KW&lt;560 (175≤HP&lt;750)</td>
<td>Pre-2007</td>
<td>Tier 1</td>
<td>1.3 (1.0)</td>
<td>9.2 (6.9)</td>
<td>11.4 (8.5)</td>
<td>0.54 (0.40)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2007+</td>
<td>Tier 3</td>
<td>4.0 (3.0)</td>
<td>3.5 (2.6)</td>
<td>0.2 (0.15)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KW&gt;560 (HP&gt;750)</td>
<td>Pre-2007</td>
<td>Tier 1</td>
<td>1.3 (1.0)</td>
<td>9.2 (6.9)</td>
<td>11.4 (8.5)</td>
<td>0.54 (0.40)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2007+</td>
<td>Tier 2</td>
<td>6.4 (4.8)</td>
<td>3.5 (2.6)</td>
<td>0.2 (0.15)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 2: Emission Standards for Stationary CI Fire Pump Engines

<table>
<thead>
<tr>
<th>Maximum engine power</th>
<th>Model years</th>
<th>Emission Rating</th>
<th>NMHC + NO&lt;sub&gt;X&lt;/sub&gt; g/KW-hr (g/hp-hr)</th>
<th>CO g/KW-hr (g/hp-hr)</th>
<th>PM g/KW-hr (g/hp-hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KW&lt;8 (HP&lt;11)</td>
<td>Pre-2011</td>
<td>Tier 1</td>
<td>10.5 (7.8)</td>
<td>8.0 (6.0)</td>
<td>1.0 (0.75)</td>
</tr>
<tr>
<td></td>
<td>2011+</td>
<td>Tier 4&lt;sup&gt;1&lt;/sup&gt;</td>
<td>7.5 (5.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8≤KW&lt;19 (11≤HP&lt;25)</td>
<td>Pre-2011</td>
<td>Tier 1</td>
<td>9.5 (7.1)</td>
<td>6.6 (4.9)</td>
<td>0.80 (0.60)</td>
</tr>
<tr>
<td></td>
<td>2011+</td>
<td>Tier 4&lt;sup&gt;1&lt;/sup&gt;</td>
<td>7.5 (5.6)</td>
<td></td>
<td>0.40 (0.30)</td>
</tr>
<tr>
<td>19≤KW&lt;37 (25≤HP&lt;50)</td>
<td>Pre-2011</td>
<td>Tier 1</td>
<td>9.5 (7.1)</td>
<td>5.5 (4.1)</td>
<td>0.80 (0.60)</td>
</tr>
<tr>
<td></td>
<td>2011+</td>
<td>Tier 4&lt;sup&gt;1&lt;/sup&gt;</td>
<td>7.5 (5.6)</td>
<td></td>
<td>0.30 (0.22)</td>
</tr>
<tr>
<td>37≤KW&lt;75 (50≤HP&lt;100)</td>
<td>Pre-2011</td>
<td>---</td>
<td>10.5 (7.8)</td>
<td>5.0 (3.7)</td>
<td>0.80 (0.60)</td>
</tr>
<tr>
<td></td>
<td>2011–2013&lt;sup&gt;2&lt;/sup&gt;</td>
<td>---</td>
<td>10.5 (7.8)</td>
<td>5.0 (3.7)</td>
<td>0.80 (0.60)</td>
</tr>
<tr>
<td></td>
<td>2011+</td>
<td>Tier 3&lt;sup&gt;1&lt;/sup&gt;</td>
<td>4.7 (3.5)</td>
<td></td>
<td>0.40 (0.30)</td>
</tr>
<tr>
<td>75≤KW&lt;130 (100≤HP&lt;175)</td>
<td>Pre-2010</td>
<td>---</td>
<td>10.5 (7.8)</td>
<td>5.0 (3.7)</td>
<td>0.80 (0.60)</td>
</tr>
<tr>
<td></td>
<td>2010–2012&lt;sup&gt;2&lt;/sup&gt;</td>
<td>---</td>
<td>10.5 (7.8)</td>
<td>5.0 (3.7)</td>
<td>0.80 (0.60)</td>
</tr>
<tr>
<td></td>
<td>2010+</td>
<td>Tier 3&lt;sup&gt;1&lt;/sup&gt;</td>
<td>4.0 (3.0)</td>
<td></td>
<td>0.30 (0.22)</td>
</tr>
<tr>
<td>130≤KW&lt;450 (175≤HP&lt;600)</td>
<td>Pre-2009</td>
<td>---</td>
<td>10.5 (7.8)</td>
<td>3.5 (2.6)</td>
<td>0.54 (0.40)</td>
</tr>
<tr>
<td></td>
<td>2009–2011&lt;sup&gt;2&lt;/sup&gt;</td>
<td>---</td>
<td>10.5 (7.8)</td>
<td>3.5 (2.6)</td>
<td>0.54 (0.40)</td>
</tr>
<tr>
<td></td>
<td>2009+</td>
<td>Tier 3&lt;sup&gt;1&lt;/sup&gt;</td>
<td>4.0 (3.0)</td>
<td></td>
<td>0.20 (0.15)</td>
</tr>
<tr>
<td>450≤KW≤560 (600≤HP&lt;750)</td>
<td>Pre-2009</td>
<td>---</td>
<td>10.5 (7.8)</td>
<td>3.5 (2.6)</td>
<td>0.54 (0.40)</td>
</tr>
<tr>
<td></td>
<td>2009+</td>
<td>Tier 3&lt;sup&gt;1&lt;/sup&gt;</td>
<td>4.0 (3.0)</td>
<td></td>
<td>0.20 (0.15)</td>
</tr>
<tr>
<td>KW&gt;560 (HP&gt;750)</td>
<td>Pre-2008</td>
<td>---</td>
<td>10.5 (7.8)</td>
<td>3.5 (2.6)</td>
<td>0.54 (0.40)</td>
</tr>
<tr>
<td></td>
<td>2008+</td>
<td>Tier 2&lt;sup&gt;1&lt;/sup&gt;</td>
<td>6.4 (4.8)</td>
<td></td>
<td>0.20 (0.15)</td>
</tr>
</tbody>
</table>

1 These ratings are more stringent than required for fire pump engines since they include CO standards. They can still be used by engineers to verify compliance with the emission standards.
2 The emission standards for these specified model year ranges only apply to engines in the specified maximum engine power category that have a rated speed greater than 2,650 rpm.

[40 CFR §60.4205]

### C. COMPLIANCE DEMONSTRATION

1) Pre-2007 model year engines, excluding fire pump engines: The Permittee shall demonstrate compliance with the emission standards in Table 1 by one of the following:
   a) Purchasing an engine certified to the applicable emission standards for the same maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.
   b) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in 40 CFR §60.4212 and these methods must have been followed correctly.
   c) Keeping records of data from the engine manufacturer or control device vendor indicating compliance with the standards.
d) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in 40 CFR §60.4212, as applicable.

2) 2007 model year and later engines, excluding fire pump engines: Engines shall be certified by the manufacturer to meet the standards in Table 1 for the same maximum engine power category and corresponding model year.

3) Fire pump engines manufactured before the dates in Table 3: The Permittee shall demonstrate compliance with the emission standards in Table 2 by one of the methods listed in Subsection 1) of this Permit Condition:

<table>
<thead>
<tr>
<th>Engine power</th>
<th>Starting model year new fire pump engines must be certified</th>
</tr>
</thead>
<tbody>
<tr>
<td>KW&lt;75 (HP&lt;100)</td>
<td>2011</td>
</tr>
<tr>
<td>75≤KW&lt;130 (100≤HP&lt;175)</td>
<td>2010</td>
</tr>
<tr>
<td>130≤KW&lt;185 (175≤HP&lt;250)</td>
<td>2009</td>
</tr>
</tbody>
</table>

4) Fire pump engines manufactured after the dates specified in Table 3 of this Permit: Engines shall be certified by the manufacturer to meet the standards specified in Table 2 for the same maximum engine power category and corresponding model year.

[D. FUEL STANDARDS]

The Permittee shall only use diesel fuel that has a minimum cetane index of 40 or a maximum aromatic content of 35 volume percent; and has a maximum sulfur content of 15 parts per million (ppm) in CI ICE, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted:

[D. FUEL STANDARDS] [40 CFR §§60.4207(a,b), 80.510(a,b)].

[E. MODEL YEAR 2008 AND LATER STATIONARY ICE LESS THAN 50 HP]

1) Stationary ICE less than 50 HP that have adjustable parameters must meet all the requirements of this permit for any adjustment in the physically adjustable range.

2) The Permittee shall not equip any ICE with a defeat device, as defined in this permit.

[E. MODEL YEAR 2008 AND LATER STATIONARY ICE LESS THAN 50 HP] [40 CFR 60.4202(a)(1)(ii), 60.4205(b), 1039.115]

[F. ADDITIONAL NSPS SUBPART III REQUIREMENTS]

1) Opacity Standard: For 2007 model year and later CI ICE, the Permittee shall not allow exhaust opacity to exceed 15% during the lugging mode. This restriction does not apply to fire pump engines.

[F. ADDITIONAL NSPS SUBPART III REQUIREMENTS] [40 CFR §§60.4202, 60.4205] [40 CFR §89.113(a)(2)]

2) Crankcase emissions: Naturally aspirated engines shall not discharge crankcase emissions into the ambient atmosphere, unless such crankcase emissions are permanently routed into the exhaust and included in all exhaust emission measurements. This provision does not apply to engines using turbochargers, pumps, blowers, or superchargers for air induction.

[F. ADDITIONAL NSPS SUBPART III REQUIREMENTS] [40 CFR §§60.4205, 89.112(e), 1039.115(a)]

3) The Permittee shall operate and maintain the engine according to the manufacturer’s written instructions, or procedures developed by the Permittee that are approved by the engine manufacturer, over the entire life of the engine.

[F. ADDITIONAL NSPS SUBPART III REQUIREMENTS] [40 CFR §§60.4211(a), 60.4206]

4) The Permittee shall only change those engine settings that are permitted by the manufacturer.

[F. ADDITIONAL NSPS SUBPART III REQUIREMENTS] [40 CFR §60.4211(a)]

5) The Permittee shall meet the requirements of 40 CFR Part 89 as it applies.

[F. ADDITIONAL NSPS SUBPART III REQUIREMENTS] [40 CFR §60.4211(a)]
SECTION 7: REQUIREMENTS FOR STATIONARY ICE SUBJECT TO NSPS SUBPART JJJJ

A. APPLICABILITY

The following engines listed below are subject to NSPS subpart JJJJ: Standards of Performance for Stationary Spark Ignition (SI) Internal Combustion Engines and this permit Section:

1) Any emergency stationary SI ICE that was ordered after June 12, 2006 and manufactured after January 1, 2009.
2) Any emergency stationary SI ICE that was modified or reconstructed after June 12, 2006.

[40 CFR 60.4230(a)]

B. EMISSION STANDARDS

Stationary SI ICE shall be certified by the engine manufacturer to meet the following emission standards:

1) Stationary SI ICE with a maximum engine power less than or equal to 25 HP manufactured on or after July 1, 2008 or that have been modified or reconstructed after June 12, 2006 shall be certified to meet the emission standards and related requirements for nonhandheld engines in Table 4. Engines with a date of manufacture prior to 7/1/08 must comply with the emission standards specified in Table 4 applicable to engines manufactured on 7/1/08.

Table 4: Certification Requirements for SI ICE ≤ 19 kW (25 HP)

<table>
<thead>
<tr>
<th>Engine Displacement</th>
<th>Manufacture Date</th>
<th>Emission Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 225 cc</td>
<td>7/1/08 to 12/31/11</td>
<td>40 CFR part 90.</td>
</tr>
<tr>
<td></td>
<td>1/1/12 or later</td>
<td>40 CFR part 1054.</td>
</tr>
<tr>
<td>≥ 225 cc</td>
<td>7/1/08 to 12/31/10</td>
<td>40 CFR part 90.</td>
</tr>
<tr>
<td></td>
<td>1/1/11 or later</td>
<td>40 CFR part 1054.</td>
</tr>
</tbody>
</table>

cc = cubic centimeters

[40 CFR §§60.4233(a) and (f)(1)] [40 CFR §§90.103, 1054.103, 1054.105]

2) Gasoline and rich burn LPG engines with a maximum engine power greater than 25 HP manufactured after January 1, 2009 or that have been modified or reconstructed after June 12, 2006 shall be certified to meet the emission standards and related requirements in Table 5. Engines with a date of manufacture prior to 1/1/09 must comply with the emission standards specified in Table 5 applicable to engines manufactured on 1/1/09.

Table 5: Certification Requirements for Gasoline and Rich Burn LPG Engines > 25 HP

<table>
<thead>
<tr>
<th>Maximum Engine Power</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 &lt; HP &lt; 130</td>
<td>Phase 1 emission standards in 40 CFR 90.103, applicable to class II engines</td>
</tr>
<tr>
<td>HP ≥ 130</td>
<td>40 CFR Part 1048</td>
</tr>
<tr>
<td>Alternative for SI ICE 25 &lt; HP ≤ 40, total displacement ≤ 1,000 cc</td>
<td>40 CFR part 90 or 1054, as appropriate</td>
</tr>
</tbody>
</table>

[40 CFR §§§60.4233(b)-(c), 60.4233(f)(2)-(3)]

3) SI ICE with a maximum engine power greater than 25 HP, excluding gasoline and rich burn LPG engines, shall be certified to meet the emission standards in Table 6. For engines with a maximum engine power greater than 100 HP manufactured prior to 1/1/2011, that were certified to the standards in 40 CFR Part 1048 applicable to engines that are not severe duty engines, if such engine was certified to a CO standard above the standard in Table 6, the Permittee may meet the CO certification standard for which the engine was certified.
### Table 6: Certification Requirements for New SI ICE >25 HP, Excluding Gasoline and Rich Burn LPG Engines

<table>
<thead>
<tr>
<th>Maximum Engine Power</th>
<th>Manufacture Date</th>
<th>Emission standards (g/HP-hr)</th>
<th>Emission standards (ppmv at 15% O₂)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>NOx</td>
<td>CO</td>
</tr>
<tr>
<td>25 &lt; HP &lt; 130</td>
<td>01/01/2009</td>
<td>N/A</td>
<td>387</td>
</tr>
<tr>
<td>HP ≥ 130</td>
<td></td>
<td>2.0</td>
<td>4.0</td>
</tr>
<tr>
<td>25 &lt; HP &lt; 100</td>
<td>01/01/2009 - 12/31/2010</td>
<td>2.0</td>
<td>4.0</td>
</tr>
</tbody>
</table>

[40 CFR §60.4233(d) - (e)]

4) Natural gas and lean burn LPG engines with a maximum engine power:
   a) Greater than 25 HP but less than 130 HP that were manufactured prior to 1/1/2009 and modified or reconstructed after 6/12/06 shall comply with the emission standards in Table 6;
   b) Equal to or greater than 130 HP that were manufactured prior to 1/1/2009 and modified or reconstructed after 6/12/06 shall comply with the emission standards in Table 7.

### Table 7: Emission Standards for Modified & Reconstructed Natural Gas & Lean Burn LPG ICE >130 HP

<table>
<thead>
<tr>
<th>Maximum Engine Power</th>
<th>Emission standards (g/HP-hr)</th>
<th>Emission standards (ppmv at 15% O₂)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NOx</td>
<td>CO</td>
</tr>
<tr>
<td>HP ≥ 130</td>
<td>3.0</td>
<td>4.0</td>
</tr>
</tbody>
</table>

[40 CFR §60.4233(f)(4)]

### C. FUEL REQUIREMENTS

1) The Permittee shall only operate stationary SI ICE using gasoline, natural gas, or LPG.
   [County Rule 220 §302.2]

2) The Permittee may operate a stationary SI natural gas fired engine using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the Permittee shall conduct a performance test to demonstrate compliance with the emission standards of 40 CFR 60.4233.
   [40 CFR §60.4243(e)]

3) Engines that burn gasoline must meet gasoline sulfur standards of 30 ppm per gallon as a refinery or importer average and 80 ppm per gallon as a per-gallon cap.
   [40 CFR §§60.4235, 80.195]

### D. ADDITIONAL REQUIREMENTS

1) The Permittee shall operate and maintain the certified SI ICE according to the manufacturer’s emission-related written instructions.

2) The Permittee shall meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply
   [40 CFR §60.4243(a)]

3) The Permittee shall not install SI ICE with a maximum engine power:
   a) Equal to or less than 25 HP that do not meet the applicable requirements in 40 CFR 60.4233 after July 1, 2010;
b) Greater than 25 HP that do not meet the applicable requirements in 40 CFR 60.4233 after January 1, 2011.

c) These installation dates do not apply to SI ICE that have been reconstructed, nor to second hand engines or engines that have been removed and reinstalled at a new location.

[40 CFR §60.4236]

SECTION 8: REQUIREMENTS FOR STATIONARY ICE SUBJECT TO 40 CFR PART 63, SUBPART ZZZZ

A. APPLICABILITY
The requirements of 40 CFR 63 Subpart ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) and this Permit Section apply to each stationary RICE that was ordered by the original owner prior to June 12, 2006, except for the following:

1) Residential, commercial, and institutional emergency RICE.

2) Emergency RICE subject to 40 CFR, Subpart IIII.

3) Emergency RICE subject to 40 CFR, Subpart JJJJ

4) Stationary RICE that is tested at a stationary test cell/stand.

5) Stationary RICE that is used for national security purposes.

[40 CFR §§63.6585; 63.6590]

B. OPERATING REQUIREMENTS
1) The Permittee shall operate and maintain all engines and associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Control Officer which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR §63.6605]

2) The Permittee shall operate and maintain each engine according to the manufacturer's emission-related operation and maintenance instructions or develop and follow the Permittee’s own maintenance plan which must provide to the extent practicable for the operation and maintenance of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[40 CFR §63.6640(a); Table 6(9)]

3) During periods of startup the Permittee shall minimize the engine’s time spent at idle and minimize the engine’s startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

[40 CFR §63.6625(h)]

C. MAINTENANCE SCHEDULE
The Permittee shall comply with the following for each engine subject to this Permit Condition:

1) Change oil and filter or perform an Oil Analysis Program every 500 hours of operation or annually, whichever comes first. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity and percent water content. The condemning limits for these parameters are as follow:

a) Total Base Number is less than 30 percent of the Total Base Number of the oil when new;

b) Viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new;

c) Percent water content (by volume) is greater than 0.5.
If none of these limits are exceeded, the Permittee is not required to change the oil. If any of the limits are exceeded, the Permittee must change the oil before continuing to use the engine. The Permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

2) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;

3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

4) If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required by this Condition, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

[40 CFR §§63.6603(a); Table 2d(4)]

SECTION 9: ODORS AND GASEOUS AIR CONTAMINANTS

A. ODOR CONTROL REQUIREMENTS

1) The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under his control in such quantities or concentrations as to cause air pollution.

   [County Rule 320 §300]

2) Reasonable Stack Height Required: Where a stack, vent or other outlet is at such a level that air contaminants are discharged to adjoining property, the Control Officer may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet to a degree that will adequately dilute, reduce or eliminate the discharge of air contaminants to adjoining property.

   [County Rule 320 §303]

3) Limitation for Hydrogen Sulfide: The Permittee shall not emit hydrogen sulfide from any location in such a manner or amount that the concentration of such emissions into the ambient air at any occupied place beyond the premises on which the source is located exceeds 0.03 parts per million by volume for any averaging period of 30 minutes or more.

   [County Rule 320 §304]

B. COMPLIANCE DEMONSTRATION

1) The Permittee shall perform a hydrogen sulfide compliance demonstration within 90 days of either of the following:

   a) The receipt of three odor complaints in any 12 consecutive month period; or

   b) A written request from the Control Officer.

2) The compliance demonstration shall be performed by one of the following methods:

   a) Conduct a test to monitor hydrogen sulfide levels; or

   b) Conduct an engineering evaluation (air dispersion modeling and analysis) to determine the hydrogen sulfide concentration levels.

3) The compliance demonstration shall be performed at a location representing the nearest occupied place beyond the premises on which the source of hydrogen sulfide is located.

   [County Rule 220 §302.4] [County Rule 320 §304]
SECTION 10: MONITORING/RECORDKEEPING REQUIREMENTS

A. EMERGENCY PROVISION RECORDKEEPING REQUIREMENTS
The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

1) An emergency occurred and the Permittee can identify the cause or causes of the emergency;
2) At the time of the emergency the permitted source was being properly operated;
3) 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 in the permit; and
4) The Permittee met the Emergency Reporting requirements in Section 11 of this General Permit.

[County Rule 130 §402]

B. LOGGING REQUIREMENTS FOR FACILITY CHANGES
If the Permittee makes a change that is required to be logged per Permit Section 4, Condition E, the Permittee shall perform such logging in indelible ink in a bound logbook with sequentially numbered pages, or in any other form, including electronic format, if approved by the Control Officer. Each log entry shall include at least the following information:

1) A description of each change including:
   a) A description of any process change;
   b) A description of any equipment change, including both old and new equipment descriptions, model numbers, and serial numbers, or any other unique equipment number; and
   c) A description of any process material change.
2) The date and time that the change occurred;
3) The provision of this General Permit that authorizes the change to be made with logging; and
4) The date the log entry was made and the first and last name of the person making the log entry.

[County Rule 220 §502]

C. STATIONARY EMERGENCY ICE
1) The Permittee shall maintain the following records for all stationary ICE:
   a) An initial one time entry listing the particular engine combustion type (compression or spark-ignition or rich or lean burn); manufacturer; model designation, rated brake horsepower, serial number and where the engine is located on the site.
   b) Monthly rolling twelve month total of hours of operation, including hours of operation for testing, reliability and maintenance.
   c) Fuel type and sulfur content of fuel. The Permittee shall maintain fuel receipts, contract specifications, pipeline meter tickets, Material Safety Data Sheets (MSDS), fuel supplier information or purchase records, if applicable, from the fuel supplier, indicating the sulfur content of the fuel oil. In lieu of these, testing of the fuel oil for sulfur content to meet the applicable sulfur limit shall be permitted as evidence of compliance.
   d) An explanation for the use of the engine if it is used as an emergency engine.

[County Rule 220 §302.7][SIP Rule 324 §§502.1, 502.4] [40 CFR §§60.4214(b), 60.4245(b), 63.6655(f)]

2) The Permittee shall maintain records of all maintenance performed on the engines subject to NSPS Subpart JJJJ.

[40 CFR §60.4245(a)(2)]

3) The Permittee shall maintain a copy of manufacturer data for each engine subject to NSPS Subparts IIII or JJJJ indicating compliance with the emission standards in Sections 6 and 7 of this Permit, as applicable.

[County Rule 220 §302.7][40 CFR §§60.4211(b)(3), 60.4245(a)(3)]
4) For each engine subject to NSPS Subpart III or 40 CFR 63 Subpart ZZZZ, the Permittee shall maintain an onsite copy of the manufacturer’s written instructions, or procedures developed by the Permittee in accordance with these Permit Conditions and make it available to MCAQD upon request.

   [County Rule 220 §302.7] [40 CFR §§63.6655(e), 63.6660]

5) For each emergency ICE subject to 40 CFR 63, Subpart ZZZZ, the Permittee shall maintain records which must include, at a minimum, the following:

   a) Oil and filter change dates and corresponding hour on the hour meter;
   b) Inspection and replacement dates for air cleaners, hoses, and belts; and
   c) Records of other emission-related repairs and maintenance performed.

   [40 CFR §§63.6640(a), 63.6655(e)(2), 63.6660]

D. ODORS AND GASEOUS AIR CONTAMINANTS
   The Permittee shall maintain records of any process upsets that would cause the release of hydrogen sulfide or other waste gases into the atmosphere.

   [County Rule 220 §§302.7, 500] [County Rule 100 §504]

E. NON-ROAD ENGINES
   The Permittee shall maintain a log of the start-up date and location of any non-road engines at the facility. The log shall be updated any time a non-road engine moves from any given location at the facility.

   [County Rule 220 §302.7]

F. RECORDS RETENTION REQUIREMENTS
   Any records required by this Permit Section shall be retained for five years and shall be made available to the Control Officer upon request.

   [County Rule 100 §504] [County Rule 220 §501]

SECTION 11: REPORTING REQUIREMENTS

A. CERTIFICATION OF TRUTH, ACCURACY, AND COMPLETENESS
   Any document that is required to be submitted by this General Permit, including reports, shall contain a certification by the facility owner, or other responsible official as defined in County Rule 100 § 200.95, of truth, accuracy, and completeness. This certification and any other certification required under this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

   [County Rule 100 §401] [County Rule 210 §305.1(e)]

B. DUTY TO PROVIDE INFORMATION
   As directed, the Permittee or applicant for an ATO shall furnish to the Control Officer any information requested pursuant to this General Permit within a reasonable time period and manner, as determined by the Control Officer. Failure to submit the requested information in a reasonable time period may lead to revocation of the ATO or denial of the application for an ATO under this General Permit.

   If the Permittee has failed to submit any relevant facts or has submitted incorrect information in the application for an ATO, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts of corrected information.

   [County Rule 220 §§301.5, 302.13]

C. DEVIATIONS FROM PERMIT REQUIREMENTS
   The Permittee shall report any deviations from the permit requirements, including those attributable to upset conditions, the probable cause of such deviations, and any corrective actions or preventive measures taken. The Permittee shall submit the report to the Control Officer within 2 working days from knowledge of the deviation.

   [County Rule 210 §§302.1(e), 305.1(c)(2)] [County Rule 230 §302.4(a)]
D. **DEVIATIONS FROM STATIONARY ICE MAINTENANCE SCHEDULE**

The Permittee shall report any failure to perform a maintenance operation on the schedule required by Section 8 of this Permit and the Federal, State or local law under which the risk was deemed unacceptable. The Report shall be submitted to the Control Officer, Attn: Compliance Division Manager, within 2 working days after the date on which the maintenance operation was required to be performed. A subsequent report shall be submitted to the Control Officer within 2 working days after the required maintenance operation is performed.

[County Rule 220 §302.8] [County Rule 130 §402.4] [40 CFR §63.6640(b)]

E. **EMERGENCY REPORTING**

The Permittee, as soon as possible, shall telephone the Control Officer giving notice of the emergency and shall submit a notice of the emergency to the Control Officer by certified mail, facsimile, or hand delivery within 2 working days of the time when operating limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

[County Rule 130 §402]

F. **EMISSION INVENTORY**

If notified by the Control Officer, the Permittee shall submit an annual emissions inventory report to the Control Officer, Attention: Air Quality Emissions Unit Manager, in accordance with County Rule 100. The report shall include the throughput and any excess emissions reported during the previous calendar year.

[County Rule 100 §505]

G. **FACILITY CHANGE REPORTING**

1) Any advance written notice required by Permit Section 4, Condition E shall meet all of the following requirements:

   a) The notice shall be by certified mail or hand delivery and shall be received by the Control Officer the minimum amount of time in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided with less than required notice, but must be provided as far in advance of the change, or if advance notification is not practicable, as soon after the change, as possible.

   [County Rule 220 §404.4]

   b) The written notice shall include:

      (1) When the proposed change will occur;

      (2) A description of the change;

      (3) Any change in emissions of regulated air pollutants; and

      (4) Any permit term or condition that is no longer applicable as a result of the change.

   [County Rule 220 §404.5]

2) Annual Facility Change Report

   The Permittee shall file a copy of all facility change logs required by this General Permit with the Control Officer within 30 days after each anniversary of the permit issue date. If no changes were made at the source requiring logging, a statement to that effect shall be filed instead.

   [County Rule 220 §503]

**SECTION 12: FUGITIVE DUST FROM DUST-GENERATING OPERATIONS**

A. **APPLICABILITY:**

1) The provisions of this Permit Section apply to all dust-generating operations except for those dust-generating operations listed in Condition B of this Permit Section. Any person engaged in a dust-generating operation subject to this Permit Section shall be subject to the standards and/or requirements of this Permit Section before, after, and while conducting such dust-generating operation, including during weekends, after work hours, and on holidays.
2) For the purpose of this Permit, any control measure that is implemented must achieve the applicable standard(s) described in County Rule 310, as determined by the corresponding test method(s), as applicable, and must achieve other applicable standard(s) set forth in County Rule 310.

3) Regardless of whether a dust-generating operation is in compliance with an approved Dust Control Plan or there is no approved Dust Control Plan, the owner and/or operator of a dust-generating operation shall be subject to all requirements of County Rule 310 at all times.

4) Failure to comply with the provisions of these requirements, as applicable, and/or of an approved Dust Control Plan, shall constitute a violation.

[County Rule 310 §§102; 301]

B. EXEMPTIONS:
The provisions of this Permit Section shall not apply to the following activities:

1) Normal farm cultural practices according to Arizona Revised Statutes (A.R.S.) § 49-457 and A.R.S. § 49-504.4.

2) Emergency activities that may disturb the soil conducted by any utility or government agency in order to prevent public injury or to restore critical utilities to functional status.

3) Establishing of initial landscapes without the use of mechanized equipment, conducting landscape maintenance without the use of mechanized equipment, and playing on or maintaining a field used for non-motorized sports. However, establishing initial landscapes without the use of mechanized equipment and conducting landscape maintenance without the use of mechanized equipment shall not include grading, or trenching performed to establish initial landscapes or to redesign existing landscapes.

4) Rooftop operations for cutting, drilling, grinding, or coring roofing tile when such activity is occurring on a pitched roof.

[County Rule 310 §103]

C. DUST CONTROL PLAN REQUIREMENT
For dust-generating operations with a disturbed surface area equal to or greater than 0.10 acre (4,356 square feet), the Permittee shall submit to the Control Officer a Dust Control Plan with the permit applications before commencing any routine dust-generating operation. The Dust Control Plan shall be kept available onsite at all times. The Permittee shall comply with the requirements of the Dust Control Plan and the provisions of MCAQD Rule 310 Sections 301 – 310 at all times.

[SIP Rule 310 §§ 301-310, 402, 409]

D. VISIBLE EMISSION REQUIREMENTS FOR DUST-GENERATING OPERATIONS:

1) The Permittee shall not cause or allow visible fugitive dust emissions to exceed 20% opacity.

2) The Permittee shall not cause or allow visible emissions of particulate matter, including fugitive dust, beyond the property line within which the emissions are generated. Visible emissions shall be determined by a standard of no visible emissions exceeding 30 seconds in duration in any six-minute period as determined by using EPA Reference Method 22. This requirement does not apply to dust-generating operations conducted within 25 feet of the property line.

[County Rule 310 §303.1]

E. EXEMPTIONS FROM DUST-GENERATING OPERATION OPACITY LIMITATION REQUIREMENT:

1) If wind conditions cause fugitive dust emissions to exceed the opacity requirements in this permit, despite implementation of the Dust Control Plan, an owner and/or operator shall:
   a) Ensure that all control measures and requirements of the Dust Control Plan are implemented and the subject violations cannot be prevented by better application, operation, or maintenance of these measures and requirements.
Cease dust-generating operations and stabilize any disturbed surface area consistent with the Stabilization Requirements of this Permit Section.

c) Compile records consistent with the Recordkeeping requirements in Condition L of this Permit Section and document the control measure and other Dust Control Plan requirements implemented.

2) Emergency Maintenance of Flood Control Channels and Water Retention Basins: The opacity limit shall not apply to emergency maintenance of flood control channels and water retention basins, provided that control measures are implemented.

[County Rule 310 §303.2]

F. STABILIZATION REQUIREMENTS FOR DUST-GENERATING OPERATIONS:

1) Unpaved Parking Lot: The owner and/or operator of any unpaved parking lot shall not allow visible fugitive dust emissions to exceed 20% opacity and shall not allow silt loading equal to or greater than 0.33 oz/ft2. However, if silt loading is equal to or greater than 0.33 oz/ft2, then the owner and/or operator shall not allow the silt content to exceed 8%.

[County Rule 310 §304.1]

2) Unpaved Haul/Access Road:

   a) The owner and/or operator of any unpaved haul/access road (whether at a work site that is under construction or at a work site that is temporarily or permanently inactive) shall not allow visible fugitive dust emissions to exceed 20% opacity and shall not allow silt loading equal to or greater than 0.33 oz/ft2. However, if silt loading is equal to or greater than 0.33 oz/ft2, then the owner and/or operator shall not allow the silt content to exceed 6%.

   b) The owner and/or operator of any unpaved haul/access road (including at a work site that is under construction or a work site that is temporarily or permanently inactive) shall, as an alternative to meeting the stabilization requirements for an unpaved haul/access road in Subsection 2)a) of this Permit Condition, limit vehicle trips to no more than 20 per day per road and limit vehicle speeds to no more than 15 miles per hour. If complying with this Subsection, the owner and/or operator must include, in a Dust Control Plan, the maximum number of vehicle trips on the unpaved haul/access roads each day (including number of employee vehicles, earthmoving equipment, haul trucks, and water trucks) and a description of how vehicle speeds will be restricted to no more than 15 miles per hour.

[County Rule 310 §304.2]

3) Disturbed Surface Area: The owner and/or operator of any disturbed surface area on which no activity is occurring (including at a work site that is under construction or a work site that is temporarily or permanently inactive) shall meet at least one of the standards described below, as applicable. Should such a disturbed surface area contain more than one type of stabilization characteristic, such as soil, vegetation, or other characteristic, which is visibly distinguishable, then the owner and/or operator shall test each representative surface separately for stability, in an area that represents a random portion of the overall disturbed conditions of the site, in accordance with the appropriate test methods described in Section 501.2(c) of County Rule 310 and in Appendix C (Fugitive Dust Test Methods) of County rules. The owner and/or operator of such disturbed surface area on which no activity is occurring shall be considered in violation of County Rule 310 if the area is not maintained in a manner that meets at least one of the standards listed below, as applicable. An area is considered to be a disturbed surface area until the activity that caused the disturbance has been completed and the disturbed surface area meets the standards described in this Permit Section.

   a) Maintain a soil crust;

   b) Maintain a threshold friction velocity (TFV) for disturbed surface areas corrected for non-erodible elements of 100 cm/second or higher;

   c) Maintain a flat vegetative cover (i.e., attached (rooted) vegetation or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind) that is equal to at least 50%;
d) Maintain a standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 30%;

e) Maintain a standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 10% and where the threshold friction velocity is equal to or greater than 43 cm/second when corrected for non-erodible elements;

f) Maintain a percent cover that is equal to or greater than 10% for non-erodible elements; or

g) Comply with a standard of an alternative test method, upon obtaining the written approval from the Control Officer and the Administrator.

[County Rule 310 §304.3]

4) Vehicle Test and Development Facilities and Operations: No stabilization requirement shall apply to vehicle test and development facilities and operations when dust is required to test and validate design integrity, product quality, and/or commercial acceptance, if such testing is not feasible within enclosed facilities. However, all areas used to test and validate design integrity, product quality, and/or commercial acceptance shall be stabilized after such testing, in compliance with Appendix C (Fugitive Dust Test Methods) of the Rules. All areas not used to test and validate design integrity, product quality, and/or commercial acceptance shall be stabilized, in compliance with Appendix C (Fugitive Dust Test Methods) of the Rules. In addition, vehicle test and development facilities may require a Dust Control permit in accordance with Section 302 of County Rule 310.

[County Rule 310 §304.4]

G. CONTROL MEASURES FOR DUST-GENERATING OPERATIONS:
For dust-generating operations with a disturbed surface area less than 0.10 acre (4,356 square feet), the owner and/or operator shall install, maintain, and use control measures, as applicable. Control measures for specific dust-generating operations are described in this Permit Condition. The owner and/or operator of a dust-generating operation shall implement control measures before, after, and while conducting dust-generating operations, including during weekends, after work hours, and on holidays. At least one primary control measure and one contingency control measure must be identified in the Dust Control Plan for all dust-generating sources.

[County Rule 310 §305]

For the purpose of this Permit an “AREA ACCESSIBLE TO THE PUBLIC” is defined as any paved parking lot or paved roadway that can be entered or used for public travel primarily for purposes unrelated to the dust-generating operation.

[County Rule 310 §202]

1) Off-Site Hauling onto Areas Accessible to the Public: The owner and/or operator of a dust-generating operation that involves off-site hauling shall implement the following control measures:

a) When cargo compartment is loaded:
   (1) Load all haul trucks such that the freeboard is not less than three inches;
   (2) Load all haul trucks such that at no time shall the highest point of the bulk material be higher than the sides, front, and back of a cargo container area;
   (3) Prevent spillage or loss of bulk material from holes or other openings in the cargo compartment’s floor, sides, and/or tailgate(s); and
   (4) Cover cargo compartment with a tarp or other suitable closure.

b) When cargo compartment is empty:
   (1) Clean the interior of the cargo compartment; or
   (2) Cover the cargo compartment with a tarp or other suitable closure.

c) When off-site hauling, install, maintain, and use a suitable trackout control device that controls and prevents trackout and/or removes particulate matter from tires and the exterior surfaces of haul trucks and/or motor vehicles that traverse the site.

[County Rule 310 §305.1]
2) Bulk Material Hauling/Transporting When On-Site Hauling/Transporting Within the Boundaries of the Work Site but not Crossing an Area Accessible to the Public. The owner and/or operator of a dust-generating operation that involves bulk material hauling/transporting when on-site hauling/transporting within the boundaries of the work site but not crossing an area accessible to the public shall implement one of the following control measures:
   a) Limit vehicle speed to 15 miles per hour or less while traveling on the work site;
   b) Apply water to the top of the load; or
   c) Cover haul trucks with a tarp or other suitable closure.

   [County Rule 310 §305.2]

3) Bulk Material Hauling/Transporting When On-Site Hauling/Transporting Within the Boundaries of the Work Site and Crossing and/or Accessing an Area Accessible to the Public: The owner and/or operator of a dust-generating operation that involves bulk material hauling/transporting when on-site hauling/transporting within the boundaries of the work site and crossing and/or accessing an area accessible to the public shall implement all of the following control measures:
   a) Load all haul trucks such that the freeboard is not less than three inches;
   b) Load all haul trucks such that at no time shall the highest point of the bulk material be higher than the sides, front, and back of a cargo container area;
   c) Prevent spillage or loss of bulk material from holes or other openings in the cargo compartment’s floor, sides, and/or tailgate(s); and
   d) When crossing and/or accessing an area accessible to the public, install, maintain, and use a suitable trackout control device that controls and prevents trackout and/or removes particulate matter from tires and the exterior surfaces of haul trucks and/or motor vehicles that traverse the site.

   [County Rule 310 §305.3]

4) Bulk Material Stacking, Loading, and Unloading Operations: The owner and/or operator of a dust-generating operation that involves bulk material stacking, loading, and unloading operations shall implement at least one of the following control measures:
   a) Prior to stacking, loading, and unloading:
      (1) Mix material with water; or
      (2) Mix material with a dust suppressant other than water.
   b) While stacking, loading, and unloading:
      (1) Apply water; or
      (2) Apply a dust suppressant other than water.

   [County Rule 310 §305.4]

5) Open Storage Piles: The owner and/or operator of a dust-generating operation that involves an open storage pile shall implement the following control measures, as applicable, when not conducting stacking, loading, and unloading operations:
   a) Cover all open storage piles with a tarp, plastic, or other material to prevent wind from removing the covering(s) such that the covering(s) will not be dislodged by wind; or
   b) Apply water to maintain a soil moisture content at a minimum of 12%, as determined by ASTM Method D2216-05 or other equivalent methods approved by the Control Officer and the Administrator. For areas that have an optimum moisture content for compaction of less than 12%, as determined by ASTM Method D1557-02e1 or other equivalent methods approved by the Control Officer and the Administrator, maintain at least 70% of the optimum soil moisture content; or
   c) Maintain a visible crust; or
d) Implement the control measure described in Subsection 5(b) or 5(c) of this Permit Condition and construct and maintain wind barriers, storage silos, or a three-sided enclosure with walls, whose length is no less than equal to the length of the pile, whose distance from the pile is no more than twice the height of the pile, whose height is equal to the pile height, and whose porosity is no more than 50%.

[County Rule 310 §305.5]

6) Unpaved Staging Areas, Unpaved Parking Areas, and Unpaved Material Storage Areas: The owner and/or operator of a dust-generating operation that involves unpaved staging areas, unpaved parking areas, and unpaved material storage areas shall implement one or more of the following control measures:

a) Apply water so that the surface is visibly moist;

b) Pave;

c) Apply and maintain gravel, recycled asphalt, or other suitable material;

d) Apply and maintain a suitable dust suppressant other than water; or

e) Limit vehicle trips to no more than 20 per day per road and limit vehicle speeds to no more than 15 miles per hour. If complying with this Subsection, the owner and/or operator shall provide to the Control Officer the maximum number of vehicle trips on the staging areas, parking areas, and/or material storage areas each day (including number of employee vehicles, earthmoving equipment, haul trucks, and water trucks) and a description of how vehicle speeds will be restricted to no more than 15 miles per hour.

[County Rule 310 §305.6]

7) Unpaved Haul/Access Roads: The owner and/or operator of a dust-generating operation that involves unpaved haul/access roads shall implement one or more of the following control measures:

a) Apply water so that the surface is visibly moist;

b) Pave;

c) Apply and maintain gravel, recycled asphalt, or other suitable material;

d) Apply and maintain a suitable dust suppressant other than water; or

e) Limit vehicle trips to no more than 20 per day per road and limit vehicle speeds to no more than 15 miles per hour. If complying with this Subsection, the owner and/or operator shall provide to the Control Officer the maximum number of vehicle trips on the unpaved haul/access roads each day (including number of employee vehicles, earthmoving equipment, haul trucks, and water trucks) and a description of how vehicle speeds will be restricted to no more than 15 miles per hour.

[County Rule 310 §305.7]

8) Weed Abatement by Discing or Blading: The owner and/or operator of a dust-generating operation that involves weed abatement by discing or blading shall comply with all of the following control measures:

a) Before weed abatement by discing or blading occurs, apply water;

b) While weed abatement by discing or blading is occurring, apply water; and

c) After weed abatement by discing or blading occurs, pave, apply gravel, apply water, apply a suitable dust suppressant other than water, or establish vegetative ground cover.

[County Rule 310 §305.8]

9) Disturbed Surface Areas: The owner and/or operator of a dust-generating operation that involves disturbed surface areas shall implement the following control measures, as applicable:

a) Before disturbed surface areas are created, implement one of the following control measures:

(1) Pre-water site to depth of cuts, allowing time for penetration; or

(2) Phase work to reduce the amount of disturbed surface areas at any one time.
b) While disturbed surface areas are being created, implement one of the following control measures:
   (1) Apply water or other suitable dust suppressant other than water, to keep the soil visibly moist throughout the process;
   (2) Apply water to maintain a soil moisture content at a minimum of 12%, as determined by ASTM Method D2216-05 or other equivalent method as approved by the Control Officer and the Administrator. For areas that have an optimum moisture content for compaction of less than 12%, as determined by ASTM Method D1557-02e1 or other equivalent method approved by the Control Officer and the Administrator, maintain at least 70% of the optimum soil moisture content; or
   (3) Implement one of the control measures in Subsection 9)b)(1) or 9)b)(2) of this Permit Condition and construct fences or three-foot to five-foot high wind barriers with 50% or less porosity adjacent to roadways or urban areas to reduce the amount of windblown material leaving a site.

c) When the dust-generating operation is finished for a period of 30 days or longer – for longer than temporary pauses that occur during a dust-generating operation, the owner and/or operator shall implement one or more of the following control measures within ten days following the completion of such dust-generating operation:
   (1) Pave, apply gravel, or apply a suitable dust suppressant other than water;
   (2) Establish vegetative ground cover;
   (3) Implement one of the control measures in Subsection 9)c)(1) or 9)c)(2) of this Permit Condition and restrict vehicle access to the area;
   (4) Apply water and prevent access by fences, ditches, vegetation, berms, or other suitable barrier or means sufficient to prevent trespass as approved by the Control Officer; or
   (5) Restore area such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby undisturbed native conditions.

10) Easements, Rights-of-Way, and Access Roads for Utilities (Transmission of Electricity, Natural Gas, Oil, Water, and Gas) Associated With Sources That Have a Non-Title V Permit, a Title V Permit, and/or a General Permit Under Maricopa County Air Quality Department Rules: The owner and/or operator of a dust-generating operation that involves an easement, right-of-way, and access road for utilities (transmission of electricity, natural gas, oil, water, and gas) associated with sources that have a General permit shall implement at least one of the following control measures:
   a) Inside Area A, limit vehicle speed to 15 miles per hour or less and vehicle trips to no more than 20 per day per road;
   b) Outside Area A, limit vehicle trips to no more than 20 per day per road; or
   c) Implement control measures described in Subsection 7) of this Permit Condition.

H. TRACKOUT, CARRY-OUT, SPILLAGE, AND/OR EROSION:
For dust-generating operations with a disturbed surface area less than 0.10 acre (4,356 square feet), the owner and/or operator shall prevent and control trackout, carry-out, spillage, and/or erosion.
1) Criterion for Clean Up of Trackout: Remove trackout, carry-out, spillage, and/or erosion from areas accessible to the public including curbs, gutters, and sidewalks, on the following time-schedule:
   a) Immediately, when trackout, carry-out, or spillage extends a cumulative distance of 25 linear feet or more; and
   b) At the end of the workday for all other trackout, carry-out, spillage, and/or erosion

[County Rule 310 §305.11]

[County Rule 310 §305.12]
2) Control Measures:

(1) Operate a street sweeper or wet broom with sufficient water, or including but not limited to kick broom, steel bristle broom, Teflon broom, vacuum, at the speed recommended by the manufacturer and at the frequency(ies) described in this permit; or

(2) Manually sweep up deposits to comply with this Subsection.

[County Rule 310 §306.2]

I. SOIL MOISTURE:
If water is the chosen control measure in an approved Dust Control Plan, the owner and/or operator of a dust-generating operation shall operate a water application system on-site (e.g., water truck, water hose) while conducting any earthmoving operations on disturbed surface areas 1 acre or larger, unless a soil crust is maintained or the soil is sufficiently damp to prevent loose grains of soil from becoming dislodged.

[County Rule 310 §307]

J. DUST CONTROL TRAINING CLASSES FOR DUST-GENERATING OPERATIONS:
Basic Dust Control Training Class:

1) At least once every three years, the following people shall successfully complete a Basic Dust Control Training Class conducted or approved by the Control Officer.
   a) Water truck drivers.
   b) Water-pull drivers.
   c) The site superintendent or other designated on-site representative of the permit holder, if present at a site that has more than one acre of disturbed surface area.

2) The Control Officer may suspend or revoke for cause including, but not limited to, inappropriate ethical activities or conduct associated with the dust control program or repeated failure to follow the training requirements, a certification issued to a person having successfully completed a Basic Dust Control Training Class conducted or approved by the Control Officer. The Control Officer will provide written notification to such person regarding such suspension or revocation.

[County Rule 310 §309.1]

K. DUST CONTROL PLAN REVISIONS
For dust-generating operations with a disturbed surface area equal to or greater than 0.10 acre (4,356 square feet):

1) If the Control Officer determines that an approved Dust Control Plan has been followed, yet fugitive dust emissions from any dust-generating operation still exceed the standards of this Permit, then the Control Officer shall issue a written notice to the owner and/or operator of the dust-generating operation explaining such determination.

2) The owner and/or operator of a dust-generating operation shall make written revisions to the Dust Control Plan and shall submit such revised Dust Control Plan to the Control Officer within three working days of receipt of the Control Officer’s written notice, unless such time period is extended by the Control Officer, upon request, for good cause. During the time that such owner and/or operator is preparing revisions to the approved Dust Control Plan, such owner and/or operator must still comply with all requirements of this Permit.

[County Rule 310 §403.1]

3) The Permittee shall request a Dust Control Plan revision with a submittal in the manner and form prescribed by the Control Officer if:
   a) The acreage of a project changes;
   b) The permit holder changes;
   c) The name(s), address(es), or phone numbers of person(s) responsible for the submittal and implementation of the Dust Control Plan and responsible for the dust-generating operation change; and
   d) If the activities related to the purposes for which the Dust Control permit was obtained change.

[SIP Rule 310 §403.2]
L. RECORDKEEPING:
The Permittee shall maintain the following records for a period of at least five years from the date such records are established and make them available to the Control Officer upon request:

1) For dust-generating operations with a disturbed surface area equal to or greater than 0.10 acre (4,356 square feet), the Permittee shall keep a written record of self-inspection on each day dust-generating operations are conducted. Self-inspection records shall include daily inspections for crusted or damp soil, trackout conditions and clean-up measures, daily water usage, and dust suppressant application. Such written record shall also include the following information:
   a) Method, frequency, and intensity of application or implementation of the control measures;
   b) Method, frequency, and amount of water application to the site;
   c) Street sweeping frequency;
   d) Types of surface treatments applied to and maintenance of trackout control devices, gravel pads, fences, wind barriers, and tarps;
   e) Types and results of test methods conducted;
   f) If contingency control measures are implemented, actual application or implementation of contingency control measures and why contingency control measures were implemented;
   g) List of subcontractors’ names and registration numbers updated when changes are made; and
   h) Names of employee(s) who successfully completed dust control training class(es), date of the class(es) that such employee(s) successfully completed, and name of the agency/representative who conducted such class(es).

   [SIP Rule 310 §502.1]

2) For dust-generating operations with a disturbed surface area less than 0.10 acre (4,356 square feet), the Permittee shall compile and retain records (including records on any street sweeping, water applications, and maintenance of trackout control devices, gravel pads, fences, wind barriers, and tarps) that provide evidence of control measure application, by indicating the type of treatment or control measure, extent of coverage, and date applied.

   [SIP Rule 310 §502.2]

3) Upon verbal or written request by the Control Officer, the log or the records and supporting documentation shall be provided as soon as possible but no later than 48 hours, excluding weekends. If the Control Officer is at the site where requested records are kept, records shall be provided without delay.

   [SIP Rule 310 §502.3]

M. RECORDS RETENTION

1) For dust-generating operations with a disturbed surface area equal to or greater than 0.10 acre (4,356 square feet), the Permittee shall retain copies of approved Dust Control Plans, control measures implementation records, and all supporting documentation for at least six months following the termination of the dust-generating operation and for at least two years from the date such records were initiated.

   [SIP Rule 310 §503]

2) For dust-generating operations with a disturbed surface less than 0.10 acre (4,356 square feet), the Permittee shall retain records required by this rule for at least five years from the date such records are established.

   [County Rule 100 §504]