



Hot Mix Asphalt Plant Air Quality Construction Permit

Permit Number: *****DRAFT*****

Plant Number:

Company:

Contact Person:

{NAME}

{TITLE}

{PHONE}

{EMAIL ADDRESS}

{STREET ADDRESS}

{CITY}, {STATE} {ZIP}

Responsible Party:

{NAME}

{TITLE}

{PHONE}

{EMAIL ADDRESS}

{STREET ADDRESS}

{CITY}, {STATE} {ZIP}

Permitted Equipment

Site Name: {Company's Name for Plant}

Equipment Location or Staging Area: {STREET ADDRESS}
{CITY}, IA {ZIP}

Is the Equipment Portable: Yes No

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

Table 1 – Project Issuance Information

Project Number	Project Description	Stack Testing	Issuance Date
		Yes	

Under the Direction of the Director of the
Department of Natural Resources

[Engineer Initials]

PERMIT CONDITIONS

1. Emission Limits

All emission units listed in the Equipment List must comply with the applicable state, federal, and local emission limit requirements which include:

A. NSPS Subpart I (Standards of Performance for Hot Mix Asphalt Facilities) Emission Limits

The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. In accordance with 40 CFR §60.92, the following emission limits shall not be exceeded:

Table 2 - NSPS Subpart I Emission Limits

Pollutant	Emission Limit	Reference/Basis
Particulate Matter (PM) – Federal	90 mg/dscm ^{1, 2}	567 IAC 23.1(2)“f” ³
Opacity	≤ 20% ^{4, 5}	567 IAC 23.1(2)“f” ³

¹ 90 mg/dscm = 0.04 gr/dscf.

² Standard is expressed as the average of three stack test runs.

³ IAC reference to New Source Performance Standards (NSPS) Subpart I (Standards of Performance for Hot Mix Asphalt Plants; 40 CFR §60.90 – 40 CFR §60.93).

⁴ In accordance with 40 CFR §60.92, no discharge shall exhibit 20% opacity, or greater.

⁵ The emission limit is based on a six minute average.

B. Non-NSPS Emission Limits

The following emission limits apply to those emission units not subject to NSPS Subpart I and to emission units subject to NSPS Subpart I for which there is no applicable NSPS standard for the pollutant (e.g. SO₂). The owner or operator is required to report all emissions as required by law, regardless of whether a specific emission limit has been established in this permit. The following emission limits shall not be exceeded:

Table 3 - Non-NSPS Emission Limits

Pollutant	Emission Limit	Reference/Basis
Particulate Matter (PM) – State	0.15 gr/scf ^{1, 2}	567 IAC 23.4(2)
	0.1 gr/dscf ^{1, 3}	567 IAC 23.3(2)“a”
	0.6 lb/MMBTU ^{Error! Bookmark not defined., 4}	567 IAC 23.3(2)“b”
Opacity	40% ^{5, 6}	567 IAC 23.3(2)“d”
Sulfur dioxide (SO ₂)	2.5 lb/MMBTU ^{Error! Bookmark not defined., 7}	567 IAC 23.3(3)“b”
	500 ppm _v ^{Error! Bookmark not defined., 8}	567 IAC 23.3(3)“e”

¹ The emission limit is expressed as the average of three stack test runs.

² This emission standard applies to Asphalt Batching Plants that are not subject to NSPS Subpart I.

³ This emission limit applies to any emission units that are not combustion for indirect heating, not considered an Asphalt Batching Plant, and are not subject to NSPS Subpart I

⁴ This emission limit applies to indirect heating emission units.

⁵ The emission limit is based on a six minute average.

⁶ An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

⁷ This emission limit applies to emission units that combust liquid fuels.

⁸ This emission limit applies to processes, other than sulfuric acid manufacturing, not subject to 567 IAC 23.3(3)“a”, 567 IAC 23.3(3)“b”, 567 IAC 23.3(3)“c”, or 567 IAC 23.3(3)“d” that emit SO₂.

C. Site-wide Emission Limits

In accordance with 567 IAC 23.3(1)“c”, the owner or operator shall take all reasonable precautions to prevent the discharge of visible emissions of fugitive dust beyond the lot line of property on which the plant is located.

2. Compliance Demonstration(s)

If an initial stack test is specified in the “Compliance Demonstrations” table the owner or the owner’s authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 (Emission Limits) within the applicable time period specified below:

- Within 60 days after achieving the maximum production rate but not later than 180 days after the initial startup date of the proposed equipment for the addition of new equipment or the physical modification of existing equipment or control equipment.
- Within 90 days of the issuance of this permit if there is no physical modification to any emission units or control equipment.

If any additional stack testing beyond an initial test (i.e. quarterly, semi-annual, annual, etc.) is required in the “Compliance Demonstrations” table, the owner or the owner’s authorized agent shall demonstrate compliance with the emission limitations contained in Condition 1 (Emission Limits) as specified in the “Compliance Demonstrations” table. See Conditions 12.A.(4) and 12.B.(5) for notification and reporting requirements.

If stack testing is required, the owner or the owner’s authorized agent shall use the test method and run time listed in the “Compliance Demonstrations” table unless another testing methodology is approved by the Department before testing.

Table 4 - Compliance Demonstrations

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – Federal	Stack Test	See Footnote 1	1 hour	40 CFR 60, Appendix A, Method 5
PM – State	None	NA	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51, Appendix M, Method 202
Opacity	Stack Test	See Footnote 1	1 hour	40 CFR 60, Appendix A, Method 9
SO ₂	None	NA	1 hour	40 CFR 60, Appendix A, Method 6C

¹ A Hot Mix Asphalt Facility that commenced construction or modification after June 11, 1973 shall conduct stack testing as required by NSPS Subpart I. The owner or operator shall test all emission units subject to the standards in 40 CFR §60.92. The testing shall comply with the test methods detailed in 40 CFR §60.93. The definitions for commence, construction, and modification can be found in NSPS Subpart A (40 CFR §60.1 – 40 CFR §60.19).

Each emissions compliance test must be approved by the Department. Unless otherwise specified by the Department, each compliance test for an air pollutant, excluding opacity, shall consist of three separate runs. The arithmetic mean of three acceptable test runs shall apply for compliance, unless otherwise indicated by the Department.

Opacity compliance tests shall consist of a minimum of three, 1-hour runs of observations. Opacity shall be determined as the average of any 24 consecutive, 15-second observations from the data set. The opacity observation duration and averaging time requirements apply unless otherwise specified by federal rule, specified in this permit, or granted prior written approval by the Department.

In accordance with 567 IAC 21.10(7)“a”:

1. At the Department’s request, a pretest meeting shall be held not later than 15 days before the owner or operator conducts the compliance demonstration. A testing protocol shall be submitted to the Department for review no later than 15 days before the owner or operator conducts the compliance demonstration. Representatives from the Department shall attend this meeting, along with the owner and the testing firm, if any. It shall be the responsibility of the owner to coordinate and schedule the pretest meeting.
2. A representative of the Department shall be permitted to witness the tests. In order to allow a Department representative the opportunity to observe a stack test, each test must begin on a weekday, between the hours of 6 am to 6 pm. Alternative stack test times may be granted through written Department approval prior to testing.
3. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

The owner shall be responsible for the installation and maintenance of test ports.

The unit(s) being sampled shall be operated in a normal manner (i.e. not under startup or shutdown conditions) at

- (a) its maximum continuous production or operating rating as rated by the equipment manufacturer, which is listed on either the first page or Condition 3, Emission Point Characteristics, of this permit, or
- (b) a permitted rating listed elsewhere in this permit that is less than the maximum continuous production or operating rating as rated by the equipment manufacturer.

If the compliance test is conducted at less than (a) or (b) above then the owner or operator shall either retest the unit(s) under the conditions of (a) or (b) above or the Department may require additional information or action to determine the unit(s) compliance status with applicable emission limits. This information or action includes, but is not limited to, a permit amendment, additional testing, continuous monitoring, and operating data.

3. Facility-Wide Emission Unit Limitations

The owner or operator shall ensure the Hot Mix Asphalt Plant covered by this permit conforms to the following list of maximum number of emission units:

- A. Any number of storage piles for cold aggregate and Reclaimed Asphalt Pavement (RAP).
- B. Any number of cold aggregate bins and conveyers.
 - (1) Only one front end loader may be used to load the cold aggregate bins at any one time and
 - (2) Only one conveyor system may be used to transport aggregate to the dryer at any one time.
- C. Any number of RAP bins and conveyers.
 - (1) Only one front end loader may be used to load the RAP bins at any one time and
 - (2) Only one conveyor system may be used to transport RAP to the dryer at any one time.

- D. A maximum of three screens.
- E. A maximum of ten transfer points located between the cold aggregate bins and the dryer.
- F. A maximum of one dryer with a maximum heat input rating of 150.0 million British thermal units per hour (MMBTU/hr).
- G. Any number of asphalt storage tanks and fuel tanks.
- H. Any number of silos or bins and conveyers used to transport and store hot mix asphalt.
 - (1) Only one silo or bin may be loaded at any one time and
 - (2) Only one conveyor system may be used to transport hot mix asphalt to the silos or bins at any one time.
- I. A maximum of one truck loadout point for hot mix asphalt shall be used at any one time.
- J. A maximum of one hot oil heater may be located at the plant. The heater shall have a maximum heat input rating of 5.0 MMBTU/hr.
- K. A maximum of one diesel generator with a maximum rating of 1,350 brake horsepower (bhp), measured at the shaft, may be used to power the plant.

It shall be the owner’s responsibility to ensure that construction conforms to the emission unit characteristics stated above. A hot mix asphalt plant not meeting all of the requirements described above shall apply for a permit to construct as outlined in 567 IAC 22.1(3).

4. Federal Standards

- A. New Source Performance Standards (NSPS):
 - (1) Hot Mix Asphalt Facilities [as defined in 40 CFR §60.90(a)] that were constructed or modified after June 11, 1973 are subject to the following NSPS subparts:

Table 5 - NSPS Subpart I Citations

Subpart	Title	State Reference (567 IAC)	Federal Reference (40 CFR)
A	General Provisions	23.1(2)	§60.1 – §60.19
I	Standards of Performance for Hot Mix Asphalt Facilities	23.1(2)“F”	§60.90 – §60.93

NOTE: For the purposes of NSPS Subpart I, a Hot Mix Asphalt Facility is comprised only of any combination of the following: dryers, systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler, systems for mixing hot asphalt; and the loading, transfer, and storage systems associated with emission control systems. [40 CFR §60.90(a)].

- (2) Storage tanks of liquid petroleum at the site covered by this permit may be subject to the following standard:

Table 6 - NSPS Subpart Kb Citations

Construction, Modification, Reconstruction Date	Subpart	Title	State Reference (567 IAC)	Federal Reference (40 CFR)
After July 23, 1984	Kb	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984	23.1(2)“ddd”	§60.110b – §60.117b

- (3) Stationary diesel internal combustion engines at the site covered by this permit may be subject to the following NSPS standards:

Table 7 - NSPS Subpart IIII Citations

Subpart	Title	State Reference (567 IAC)	Federal Reference (40 CFR)
A	General Provisions	23.1(2)	§60.1 – §60.19
IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	23.1(2)“yyy”	§60.4200 – §60.4219

Please note a portable engine does not meet the definition of *Stationary Internal Combustion Engine*, as defined in 40 CFR §60.4219, and therefore is not subject to NSPS Subpart IIII as long as the engine does not remain in one location for more than twelve consecutive months. If the engine is ever operated as a stationary internal combustion engine, it will have to comply with the requirements of NSPS Subpart IIII.

NOTE: The absence of the inclusion of any NSPS requirements as part of this permit does not relieve the owner or operator from any obligation to comply with all applicable NSPS conditions.

B. National Emission Standards for Hazardous Air Pollutants (NESHAP):

- (1) The Hot Mix Asphalt Plant is not subject to any NESHAP standards as there is no applicable subpart for its source category at this time.
- (2) Stationary diesel internal combustion engines at the site covered by this permit may be subject to the following NESHAP standards:

Table 8- NESHAP Subpart ZZZZ Citations

Subpart	Title	State Reference (567 IAC)	Federal Reference (40 CFR)
A	General Provisions	23.1(4)	§63.1 – §63.15
ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	23.1(4)“cz”	§63.6580 – §63.6675

Please note the following:

- (a) In accordance with 40 CFR §63.6590(c), engines that are in compliance with NSPS Subpart IIII are considered in compliance with NESHAP Subpart ZZZZ and no further NESHAP Subpart ZZZZ requirements apply.
- (b) Please note a portable engine does not meet the definition of *Stationary Internal Combustion Engine*, as defined in 40 CFR §63.6675, and therefore is not subject to NESHAP Subpart ZZZZ as long as the engine does not remain in one location for more than twelve consecutive months. If the engine is ever operated as a stationary internal combustion engine, it will have to comply with the requirements of NESHAP Subpart ZZZZ.

NOTE: The absence of the inclusion of any NESHAP requirements as part of this permit does not relieve the owner or operator from any obligation to comply with all applicable NESHAP conditions.

5. Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by any federal regulation, all records as required by this permit shall be available on-site for a minimum of two years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

Prohibited Locations

- A. The owner or operator shall not locate this Hot Mix Asphalt Plant in Linn County or Polk County unless the owner or operator obtains an air quality permit for this Hot Mix Asphalt Plant from the air pollution control agency of that county. The owner or operator shall maintain the following records:
 - (1) A log of the locations where this Hot Mix Asphalt Plant operates in Iowa including:
 - a. The county and
 - b. The distance between the hot mix asphalt truck loadout emission unit and the property line.
- B. The owner or operator shall not locate this Hot Mix Asphalt Plant on the same property where emission sources are covered by an IDNR Air Quality Construction Permit, other than another Hot Mix Asphalt Plant, an Aggregate Processing Plant, Liquid Storage Tanks, or a Concrete Batch Plant. The plant shall be separated from the other Hot Mix Asphalt Plant, Aggregate Processing Plant, or Concrete Batch Plant by the distance(s) required in Condition 5.CC. (if applicable).

General Requirements for all Hot Mix Asphalt Plants

- C. The owner or operator shall not produce more than 450 tons of hot mix asphalt per hour or more than 400,000 tons of hot mix asphalt per 12-month rolling period. The owner or operator shall demonstrate compliance by either tracking (1) Hourly Production or (2) Annual Production:
 - (1) For Hourly Production, the owner or operator shall maintain a record of the maximum design rating [in tons of asphalt produced per hour (tons asphalt/hr)] of the Hot Mix Asphalt Plant or track:
 - a. The date,
 - b. The hour, and
 - c. The amount of hot mix asphalt produced (in tons) for that hour.
 - (2) For Annual Production track:
 - a. The month and year,
 - b. The amount of hot mix asphalt produced (in tons) for that month, and
 - c. The rolling 12-month total of the amount of hot mix asphalt produced (in tons).
- D. The owner or operator shall not crush or grind nonmetallic minerals, including those embedded in RAP, at the Hot Mix Asphalt Plant covered by this permit.

- E. The owner or operator shall operate and maintain all process, air pollution control, and monitoring equipment in accordance with manufacturer's specifications and maintenance schedules. The owner or operator shall maintain a log of the following information:
 - (1) The date any inspection and/or maintenance was performed;
 - (2) Any issues identified during the inspection and the date each issue was resolved;
 - (3) Any issues identified during the maintenance activities and the date each issue was resolved; and
 - (4) Identification of the staff member performing the maintenance or inspection.
- F. The owner or operator shall maintain a log of all best management practices used at the Hot Mix Asphalt Plant to minimize fugitive dust emissions.
- G. All accordance with 567 IAC 23.3(3)"b", the combustion of #1 fuel oil or #2 fuel oil with a sulfur (S) content greater than 0.5% (by weight or by wt) is not allowed at the Hot Mix Asphalt Plant.
- H. For any liquid fuel combusted at the Hot Mix Asphalt Plant, the owner or operator shall:
 - (1) Conduct an analysis and maintain records on the sulfur (S) content of each shipment of fuel received or
 - (2) Have the fuel supplier provide an analysis on the sulfur (S) content of the fuel received and maintain a record of the supplier's analysis.

Requirements for all Dryers at Hot Mix Asphalt Plants

- I. The owner or operator shall maintain a record of the manufacturer's maximum heat input rating (MMBTU/hr) of the Dryer.
- J. The owner or operator shall control the particulate matter emissions from the Dryer with a baghouse. The owner or operator shall:
 - (1) Ensure the discharge style for the Dryer Baghouse exhaust stack (emission point) is unobstructed and vertical.
 - (2) Maintain records on the maintenance conducted on the baghouse.
 - (3) Install, maintain, and operate equipment to monitor the pressure drop across the baghouse while the Dryer is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).
 - (4) Maintain a daily record of the pressure drop across the baghouse.
 - (5) Take immediate corrective action if the observed pressure drop is outside the normal operating ranges.
 - (6) Record the incident if the observed pressure drop is outside the normal operating ranges and the corrective actions taken.
- K. The owner or operator shall not process recycled asphalt shingles (RAS) that are a regulated asbestos containing material (RACM) in the Dryer. RACM is regulated by 40 CFR Part 61, Subpart M (*Nation Emission Standard for Asbestos*, 40 CFR §61.140 – 40 CFR §61.157). The definition of RACM can be found in 40 CFR §61.141. In addition, see Appendix A to Subpart M of Part 61 (*Interpretative Rule Governing Roof Removal Operations*) for the type of roofing projects regulated by the 40 CFR Part 61, Subpart M. The owner or operator shall maintain the following records on the RAS received at the Hot Mix Asphalt Plant:
 - (1) The name(s) of the suppliers of the RAS and
 - (2) Documentation from the supplier(s) that the RAS is not a RACM, as defined in 40 CFR §61.141.

- L. The combined total amount of liquid fuel (fuel oil, diesel fuel, used oil, or residual fuel) combusted in the Dryer shall not exceed 3,300,000 gallons per rolling 12-month period. The owner or operator shall maintain the following records for each month of operation:
 - (1) The month and year,
 - (2) The liquid fuel type(s) combusted in the Dryer,
 - (3) The amount of each liquid fuel type combusted in the Dryer,
 - (4) The combined total amount of all liquid fuels combusted in the Dryer, and
 - (5) The rolling twelve (12) month combined total of all liquid fuels combusted in the Dryer.
- M. Any used oil combusted in the Dryer shall not exceed the limits specified in Table 1 in 40 CFR §279.11, as amended on May 3, 1993 (reproduced below), using analytical methods specified pursuant to 40 CFR Part 279. In accordance with 40 CFR Part 279.
 - (1) The specification does not apply to mixtures of used oil and hazardous waste that continue to be regulated as hazardous waste [see 40 CFR §279.10(b)].

Table 9 - 40 CFR §279.11 (amended May 3, 1993)

Constituent/Property	Allowable Level
Arsenic (Ar)	5 ppm (maximum)
Cadmium (Cd)	2 ppm (maximum)
Chromium (Cr)	10 ppm (maximum)
Lead (Pb)	100 ppm (maximum)
Flash Point	100 °F (minimum)
Total Halogens	See Footnote 1

¹ Table 1 in 40 CFR §279.11 sets a maximum of 4,000 ppm for Total Halogens. However, as agreed upon, the Total Halogen content is limited to 1,000 ppm (See Condition 5.N.). Used oil containing more than 1,000 ppm of Total Halogens is presumed to be a hazardous waste under the rebuttal presumption provided under 40 CFR §279.10(b)(1).

- N. The Total Halogen content of any used oil combusted in the Dryer shall not exceed 1,000 ppm using the analytical methods specified in 40 CFR Part 279.
- O. The polychlorinated biphenyl (PCB) content of any used oil combusted in the Dryer shall not exceed 2 ppm using the analytical methods specified in 40 CFR §761.20(e)(2).
- P. The owner or operator shall maintain records on the used oil burned in the Dryer that demonstrate that the oil meets the requirements of on-spec used oil as specified in 40 CFR §279.11 and in 40 CFR §761.20(e).

Requirements for all Hot Oil Heaters at Hot Mix Asphalt Plants

- Q. The owner or operator shall maintain a record of the manufacturer’s maximum heat input rating (MMBTU/hr) of the Hot Oil Heater.
- R. The discharge style for the Hot Oil Heater exhaust stack (emission point) shall be unobstructed and vertical.
- S. The Hot Oil Heater shall only combust #1 fuel oil, #2 fuel oil, diesel fuel, natural gas, and/or propane. The owner or operator shall maintain a record of:
 - (1) The type of fuel combusted in the Hot Oil Heater.

Requirements for all internal combustion engines used at Hot Mix Asphalt Plants

- T. The discharge style for the exhaust stack (emission point) of any internal combustion engine listed in the Equipment List in this permit shall be unobstructed and vertical when it is used at the Hot Mix Asphalt Plant listed in this permit.
- U. For each engine listed in the Equipment List in this permit, the owner or operator shall maintain a log of:
 - (1) The manufacturer's maximum rated horsepower (in bhp) and
 - (2) The United States Environmental Protection Agency (US EPA) Tier rating.
- V. Any internal combustion engine listed in the Equipment List in this permit shall only combust #1 fuel oil, #2 fuel oil, or diesel fuel when the engine is used at the Hot Mix Asphalt Plant listed in this permit.
- W. The maximum sulfur (S) content of any #1 or #2 fuel oil or diesel fuel combusted in the internal combustion engine shall not exceed 0.0015% (by wt.).

Requirements specific to the Hot Mix Asphalt Plant in this permit

- X. [Pick Correct Option Below]

Option 1: Requirements for Hot Mix Asphalt Plants Combusting Liquid or Gaseous Fuels in the Dryer, without Control on the Truck Loadout, and Producing Hot Mix Asphalt at a Mix Temperature at or below 325 Degrees Fahrenheit.

- X. The operation of the Hot Mix Asphalt Plant shall not exceed 14 hours per day. The owner or operator shall maintain a log with the following information for each day of operation:
 - (1) The date,
 - (2) The time of startup for the Hot Mix Asphalt Plant,
 - (3) The time of shutdown for the Hot Mix Asphalt Plant, and
 - (4) The total hours of operation.
- Y. The Dryer may combust any of the following fuels: Fuel oil (#1, #2, #3, #4, #5, or #6), diesel fuel, natural gas, propane, used oil, or residual oil (blends of used oil and #6 fuel oil).
- Z. The maximum sulfur (S) content of any #3, #4, #5, or #6 fuel oil, used oil, or residual fuel (blends of used oil and #6 fuel oil) combusted in the Dryer shall not exceed 0.8% (by wt.).
- AA. The outlet temperature of the Dryer shall be a maximum of 325 °F. The owner or operator shall:
 - (1) Install and maintain a temperature recording device on the outlet of the Dryer.
 - (2) Continuously measure and continuously record the outlet temperature of the Dryer when it is in operation.
- BB. The owner or operator shall ensure the stacks of the following emission units have the minimum listed stack height (above grade):
 - (1) Dryer: 40 ft
 - (2) Hot Oil Heater: 12 ft
 - (3) Internal combustion engine (i.e. generator): 25 ft
- CC. The Hot Mix Asphalt Truck Loadout shall be located a minimum of:
 - (1) 200 feet (ft) from any property line if using an enclosed asphalt storage silo(s) or
 - (2) 250 ft if using a silo(s) open to the atmosphere.NOTE: An *enclosed asphalt storage silo* is one that is closed to the atmosphere except when being filled or unloaded.
- DD. If a diesel internal combustion engine is used at this Hot Mix Asphalt Plant, it shall be certified by the

US EPA to meet the Tier 2, Tier 3, interim Tier 4, or final Tier 4 standards for compression ignition engines in accordance with 40 CFR Part 1039.

Option 2: Requirements for Hot Mix Asphalt Plants Combusting Liquid or Gaseous Fuels in the Dryer, without Control on the Truck Loadout, and Producing Hot Mix Asphalt at a Mix Temperature at or below 340 Degrees Fahrenheit.

- X. The operation of the Hot Mix Asphalt Plant shall not exceed 14 hours per day. The owner or operator shall maintain a log with the following information for each day of operation:
 - (1) The date,
 - (2) The time of startup for the Hot Mix Asphalt Plant,
 - (3) The time of shutdown for the Hot Mix Asphalt Plant, and
 - (4) The total hours of operation.

- Y. The Dryer may combust any of the following fuels: Fuel oil (#1, #2, #3, #4, #5, or #6), diesel fuel, natural gas, propane, used oil, or residual oil (blends of used oil and #6 fuel oil).

- Z. The maximum sulfur (S) content of any #3, #4, #5, or #6 fuel oil, used oil, or residual fuel (blends of used oil and #6 fuel oil) combusted in the Dryer shall not exceed 0.8% (by wt.).

- AA. The outlet temperature of the Dryer shall be a maximum of 340 °F. The owner or operator shall:
 - (1) Install and maintain a temperature recording device on the outlet of the Dryer.
 - (2) Continuously measure and continuously record the outlet temperature of the Dryer when it is in operation.

- BB. The owner or operator shall ensure the stacks of the following emission units have the minimum listed stack height (above grade):
 - (1) Dryer: 40 ft
 - (2) Hot Oil Heater: 12 ft
 - (3) Internal combustion engine (i.e. generator): 25 ft

- CC. The Hot Mix Asphalt Truck Loadout shall be located a minimum of:
 - (1) 500 feet (ft) from any property line if using an enclosed asphalt storage silo(s) or
 - (2) 600 ft if using a silo(s) open to the atmosphere.NOTE: An *enclosed asphalt storage silo* is one that is closed to the atmosphere except when being filled or unloaded.

- DD. If a diesel internal combustion engine is used at this Hot Mix Asphalt Plant, it shall be certified by the US EPA to meet the Tier 2, Tier 3, interim Tier 4, or final Tier 4 standards for compression ignition engines in accordance with 40 CFR Part 1039.

Option 3: Requirements for Hot Mix Asphalt Plants Combusting Liquid or Gaseous Fuels in the Dryer, with Control on the Truck Loadout.

- X. The operation of the Hot Mix Asphalt Plant shall not exceed 16 hours per day. The owner or operator shall maintain a log with the following information for each day of operation:
 - (1) The date,
 - (2) The time of startup for the Hot Mix Asphalt Plant,
 - (3) The time of shutdown for the Hot Mix Asphalt Plant, and
 - (4) The total hours of operation.

- Y. The Dryer may combust any of the following fuels: Fuel oil (#1, #2, #3, #4, #5, or #6), diesel fuel, natural gas, propane, used oil, or residual oil (blends of used oil and #6 fuel oil).

- Z. The maximum sulfur (S) content of any #3, #4, #5, or #6 fuel oil, used oil, or residual fuel (blends of used oil and #6 fuel oil) combusted in the Dryer shall not exceed 0.8% (by wt.).
- AA. Emissions from the filling of any silos and any truck loadout operations shall be captured and sent to an air pollution control device.
- BB. The outlet temperature of the Dryer shall be a maximum of 340 °F. The owner or operator shall:
 - (1) Install and maintain a temperature recording device on the outlet of the Dryer.
 - (2) Continuously measure and continuously record the outlet temperature of the Dryer when it is in operation.
- CC. The Hot Mix Asphalt Truck Loadout shall be located a minimum of 200 feet from any property line.
- DD. The owner or operator shall ensure the stacks of the following emission units have the minimum listed stack height (above grade):
 - (1) Dryer: 40 ft
 - (2) Hot Oil Heater: 12 ft
 - (3) Internal combustion engine (i.e. generator): 25 ft
- EE. If a diesel internal combustion engine is used at this Hot Mix Asphalt Plant, it shall be certified by the US EPA to meet the Tier 2, Tier 3, interim Tier 4, or final Tier 4 standards for compression ignition engines in accordance with 40 CFR Part 1039.

Option 4: Requirements for Hot Mix Asphalt Plants Combusting Only Gaseous Fuels in the Dryer, without Control on the Truck Loadout, Producing Hot Mix Asphalt at a Mix Temperature at or below 325 Degrees Fahrenheit.

- X. The operation of the Hot Mix Asphalt Plant shall not exceed 14 hours per day. The owner or operator shall maintain a log with the following information for each day of operation:
 - (1) The date,
 - (2) The time of startup for the Hot Mix Asphalt Plant,
 - (3) The time of shutdown for the Hot Mix Asphalt Plant, and
 - (4) The total hours of operation.
- Y. The Dryer shall combust either natural gas or propane.
- Z. All asphalt storage silos and bins shall be enclosed when they are not being filled or unloaded.
- AA. The Hot Mix Asphalt Truck Loadout shall be located a minimum of 200 feet from any property line.
- BB. The outlet temperature of the Dryer shall be a maximum of 325 °F. The owner or operator shall:
 - (1) Install and maintain a temperature recording device on the outlet of the Dryer.
 - (2) Continuously measure and continuously record the outlet temperature of the Dryer when it is in operation.
- CC. The owner or operator shall ensure the stacks of the following emission units have the minimum listed stack height (above grade):
 - (1) Dryer: 35 ft
 - (2) Hot Oil Heater: 10 ft
 - (3) Internal combustion engine (i.e. generator): 20 ft
- DD. If a diesel internal combustion engine is used at this Hot Mix Asphalt Plant, it shall be certified by the US EPA to meet the final Tier 4 standards for compression ignition engines in accordance with 40 CFR Part 1039.

Option 5: Requirements for Hot Mix Asphalt Plants Combusting Only Gaseous Fuels in the Dryer, without Control on the Truck Loadout, Producing Hot Mix Asphalt at a Mix Temperature at or below 340 Degrees Fahrenheit.

- X. The operation of the Hot Mix Asphalt Plant shall not exceed 16 hours per day. The owner or operator shall maintain a log with the following information for each day of operation:
 - (1) The date,
 - (2) The time of startup for the Hot Mix Asphalt Plant,
 - (3) The time of shutdown for the Hot Mix Asphalt Plant, and
 - (4) The total hours of operation.
- Y. The Dryer shall combust either natural gas or propane.
- Z. All asphalt storage silos and bins shall be enclosed when they are not being filled or unloaded.
- AA. The Hot Mix Asphalt Truck Loadout shall be located a minimum of 500 feet from any property line.
- BB. The outlet temperature of the Dryer shall be a maximum of 340 °F. The owner or operator shall:
 - (1) Install and maintain a temperature recording device on the outlet of the Dryer.
 - (2) Continuously measure and continuously record the outlet temperature of the Dryer when it is in operation.
- CC. The owner or operator shall ensure the stacks of the following emission units have the minimum listed stack height (above grade):
 - (1) Dryer: 35 ft
 - (2) Hot Oil Heater: 10 ft
 - (3) Internal combustion engine (i.e. generator): 20 ft
- DD. If a diesel internal combustion engine is used at this Hot Mix Asphalt Plant, it shall be certified by the US EPA to meet the final Tier 4 standards for compression ignition engines in accordance with 40 CFR Part 1039.

Option 6: Requirements for Hot Mix Asphalt Plants Combusting Gaseous Fuels in the Dryer with Control on the Truck Loadout.

- X. The Dryer shall combust either natural gas or propane.
- Y. Emissions from the filling of any silos and any truck loadout operations shall be captured and sent to an air pollution control device.
- Z. The outlet temperature of the Dryer shall be a maximum of 340 °F. The owner or operator shall:
 - (3) Install and maintain a temperature recording device on the outlet of the Dryer.
 - (4) Continuously measure and continuously record the outlet temperature of the Dryer when it is in operation.
- AA. The owner or operator shall ensure the stacks of the following emission units have the minimum listed stack height (above grade):
 - (1) Dryer: 35 ft
 - (2) Hot Oil Heater: 10 ft
 - (3) Internal combustion engine (i.e. generator): 20 ft
- BB. If a diesel internal combustion engine is used at this Hot Mix Asphalt Plant, it shall be certified by the US EPA to meet the final Tier 4 standards for compression ignition engines in accordance with 40 CFR

Part 1039.

6. Best Management Practices (BMP)

This Hot Mix Asphalt Plant is required to employ Best Management Practices (BMP) to reasonably prevent the discharge of fugitive dust from all process equipment, storage piles, and haul roads beyond the lot line of the property on which it is located. The following are examples of reasonable practices that can be used by the owner or operator to minimize the generation of fugitive dust emissions:

- A. BMP on process equipment include, but are not limited to:
- Limit the drop heights of materials being transferred to or from any stock pile, bin, or conveyor
 - Watering materials
 - If using unenclosed aggregate storage bins, do not load aggregate within two feet of the top of the bin walls
- B. BMP on haul roads include, but are not limited to:
- Limiting truck speed on the facility property
 - Watering and/or treating unpaved roadways with chemical dust suppressants
 - Watering and/or sweeping paved roadways
 - Immediately cleaning up or dampening all material spills on the roadways
- C. BMP on storage piles include, but are not limited to:
- Covering storage piles
 - Watering storage piles
 - Partially enclosing above ground storage piles within three sided enclosures
 - Stock piles shall be kept as compact as possible
-

7. Department Review

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment covered by this permit has been evaluated for conformance with the emission limits in this permit; Iowa Code Chapter 455B; Division II; 567 IAC Chapters 21 – 33; and 40 Code of Federal Regulations (CFR) Parts 51, 52, 60, 61, and 63 and has the potential to comply. Unless stated elsewhere in this permit, any control equipment covered by this permit shall operate at all times when the emission unit(s) covered by this permit are in operation.

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant or by the applicant's representative(s) shall cause this permit to be void.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The Department assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

8. Owner and Operator Responsibility

This permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. The permit holder, owner, and operator of the facility shall assure that the installation of the equipment listed in this permit conforms to the design in the application (i.e. type, maximum rated capacity, etc.). No person shall construct, install, reconstruct or alter this

emission unit(s), control equipment, or emission point without the required amended permit.

Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for assuring that the installation, operation, and maintenance of the equipment listed in this permit is in compliance with the provisions of this permit and all other applicable requirements and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

9. Transferability

Unless the equipment is portable, this permit is not transferable from one location to another or from one piece of equipment to another. See Condition 12.A.(2) for notification requirements for relocating portable equipment [567 IAC 22.3(3)“f”].

10. Construction

A. General Requirements:

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted.

In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. If a proposed project is not timely completed, the owner or operator shall seek a permit amendment in order to revert back to the most recent previous version of the permit. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

This permit or amendment shall become void if any one of the following conditions occurs:

- (1) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not initiated within 18 months after the permit issuance date; or
- (2) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within 36 months after the permit issuance date; or
- (3) The construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within a time period specified elsewhere in this permit.

B. Changes to Plans and Specifications:

The owner or operator shall amend this permit or amendment prior to startup of the equipment if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.
- (3) The owner or operator is allowed to add or remove emission units from the equipment list specified in Table 11 without amending this permit as long as the facility continues to meet all other requirements in this permit.

Changes to the final plans and specifications shall include changes to plans and specifications for permitted equipment and control equipment and the specified operation thereof.

C. Amended Permits:

The owner or operator may continue to act under the provisions of the previous permit for the affected emission unit(s) and emission point, together with any previous amendment to the permit, until one of the following conditions occurs:

- (1) The proposed project authorized by this amendment is completed as it affects the emission unit(s) and

- emission point permitted herein; or
(2) This current amendment becomes void.
-

11. Excess Emissions

An incident of excess emissions other than as listed in 567 IAC 21.7(1) is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shut down within a reasonable period of time, as specified in 567 IAC 21.7.

An incident of excess emissions shall be orally reported by telephone, electronic mail or in person to the appropriate field office within eight hours of, or at the start of, the first working day following the onset of the incident [See Permit Condition 12.B.(1)]. A written report of an incident of excess emissions shall be submitted as a follow-up to all required initial reports within seven days of the onset of the upset condition [See Permit Condition 12.B.(2)].

12. Notification, Reporting, and Recordkeeping

- A. The owner or operator shall furnish the Department the following written notifications:
- (1) In accordance with 567 IAC 22.3(3)“b”, dates of intended startup, start of construction, and actual equipment startup. All notifications required by 567 IAC 22.3(3)“b” shall be submitted in writing within 30 days following the applicable date and include the information required by 567 IAC 22.3(3)“b”.
 - (2) In accordance with 567 IAC 22.3(3)“f”, when portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified:
 - a. At least 14 days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS.
 - b. At least 7 days before equipment relocation.
 - (3) In accordance with 567 IAC 22.3(8), a new owner shall notify the Department of the transfer of equipment ownership within 30 days of the occurrence. The notification shall include the following information:
 - The date of ownership change; the name, address, and telephone number of the responsible official, the contact person, and the owner of the equipment both before and after the ownership change; and the construction permit number(s) of the equipment changing ownership.
 - (4) Unless specified, in accordance with a federal regulation, the owner or the owner’s authorized agent shall notify the Department in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor [567 IAC 21.10(7)]. The notification shall include:
 - The time; the place; the name of the person who will conduct the tests; and other information as required by the Department.
- If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. Upon written request, the Department may allow a notification period of less than 30 days.
- B. The owner or operator shall furnish the Department with the following reports:
- (1) In accordance with 567 IAC 21.7(2), an incident of excess emissions as defined in 567 IAC 21.1 shall be reported within eight hours or at the start of the first working day following the onset of the incident. The report may be made by electronic mail, in person or by telephone.
 - (2) In accordance with 567 IAC 21.7(3), a written report of an incident of excess emissions as defined in

567 IAC 21.1 shall be submitted as a follow-up to all required initial reports to the Department within seven days of the onset of the upset condition.

- (3) Operation of this emission unit(s) or control equipment outside of those operating parameters specified in Permit Condition 5 in accordance to the schedule set forth in 567 IAC 21.7.
 - (4) In accordance with 567 IAC 21.10(6), the owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Director, no later than 30 calendar days following the end of the calendar quarter, on forms provided by the Director.
 - (5) In accordance with 567 IAC 21.10(7), a written compliance demonstration report for each compliance testing event, whether successful or not, postmarked no later than six weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met.
- C. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording unless otherwise required by another applicable law (i.e. NSPS, NESHAP, etc.).
- D. The owner or operator shall submit an updated equipment list to the Air Quality Bureau Construction Permit Supervisor at the address listed in Condition 12.E. within 30 days of the change to the equipment list.
- E. Information regarding this permit should be sent to the attention of the following individuals based on the type of information being submitted: change in ownership (Air Quality Bureau Records Center), permit correspondence including equipment list updates (Construction Permit Supervisor), stack testing correspondence (Stack Test Coordinator), and reports and notifications (Compliance Unit Supervisor and DNR Field Office). The addresses are:

(1) Air Quality Bureau
Iowa Department of Natural Resources
6200 Park Ave, Ste. 200
Des Moines, IA 50321
Telephone: (515) 725-8200
Fax: (515) 725-8201

(2) DNR Field Offices:

DNR Field Office 1
1101 Commercial Court, Suite 10
Manchester, IA 52057
Telephone: (563) 927-2640
Fax: (563) 927-2075

DNR Field Office 2
2300 15th St. SW
Mason City, IA 50401
Telephone: (641) 424-4073
Fax: (641) 424-9342

DNR Field Office 3
1900 N. Grand Ave, Ste. E17
Spencer, IA 51301
Telephone: (712) 262-4177
Fax: (712) 262-2901

DNR Field Office 4
1401 Sunnyside Ln.
Atlantic, Iowa 50022
Telephone: (712) 243-1934
Fax: (712) 243-6251

DNR Field Office 5
6200 Park Ave, Ste. 200
Des Moines, IA 50321
Telephone: (515) 725-0268
Fax: (515) 725-8201

DNR Field Office 6
1023 W. Madison
Washington, Iowa 52353
Telephone: (319) 653-2135
Fax: (319) 653-2851

13. Appeal Rights

All conditions within an original permit may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. Amended conditions within a permit amendment may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

14. Permit History

Table 10 – Permit History

Permit No.	Project No.	Description	Date	Stack Testing

