

Facility Name _____

Initial _____

Permit Number (department use only) _____



Iowa Department of Natural Resources Air Quality Construction Permit For a Concrete Batch Plant

Permit Holder

Firm: _____

Contact: _____ Responsible Party: _____

(name)

(title)

(telephone)

(street)

(city, state, zip)

Permitted Equipment

Facility Name: _____

Equipment Location or Staging Area: _____ (street)

_____ (city, state, zip)

Is the Equipment Portable? Yes No

Permit No.	Proj. No.	Description	Date	Testing	DNR USE ONLY
				NSPS I	

Plant Number: _____

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

Facilities Covered by this Permit

This permit is only applicable to a “concrete batch plant”⁽¹⁾ not otherwise excluded or in a prohibited location.⁽²⁾

⁽¹⁾“Concrete batch plant” for the purposes of this permit, means any stationary or portable facility for the production of portland concrete⁽³⁾ including all aggregate, cementitious material, Portland cement, and fly ash or slag mixing transfer and storage including weigh hopper loading, mixer or truck loading, silo loading and transferring as well as boilers, power sources (such as generators), and petroleum storage tanks.

⁽²⁾Exclusions and Prohibited Locations. The following plants shall *not* be covered under this permit

Exclusions

- a. Any concrete batch plant already subject to an existing air quality construction permit, other than a permit by rule under this subrule, or subject to an air quality operating permit is not eligible for coverage under this permit by rule unless those permits are revoked concurrently with the start of coverage under this permit by rule for the facility.
- b. Any plant subject to 567—subrule 23.1(4) (emission standards for hazardous air pollutants for source categories), rule 33.3 (special requirements for major stationary sources located in areas designated attainment or unclassified (PSD)), or rule 22.5(455B) (special requirements for nonattainment areas) is not eligible for coverage under this permit by rule.

Prohibited Locations

- c. Any concrete batch plant located in Polk or Linn County or portable facility relocating to Polk or Linn County is not eligible for coverage under this permit by rule.
- d. Any concrete batch plant that is located on the same property where emission sources are covered by an air quality construction permit is not eligible for coverage under this permit by rule.
- e. A concrete batch plant must maintain a distance of 1,000 feet from another concrete batch plant, any aggregate processing plant, or any hot mix asphalt facility.

⁽³⁾“Portland concrete” means a construction material consisting of aggregate, Portland cement, water and other materials mixed that undergo a hydration process binding the aggregate into a single mass. It is used in the construction of highways, streets, homes, and commercial buildings and for many other related projects.

Type of Facility Being Permitted

There are four types of Concrete Batch plants that can be permitted using this template. Please select the type of plant that is being permitted from the list below and follow the both the general requirements and specific operating limits for that type of plant from Section 14.

Please check the type of facility that is being permitted.

Dry Batch Plants (Truck-Mix)

	<i>Control Equipment on Truck Loadout</i>	<i>Operating Limits and Requirements</i>
<input type="checkbox"/>	Enclosure Only ⁽¹⁾	General Requirements and Section 14a
<input type="checkbox"/>	Baghouse (Stack Height Between 20 Feet and 37 Feet) ⁽²⁾	General Requirements and Section 14b
<input type="checkbox"/>	Baghouse (Stack Height 37 Feet or Higher) ⁽²⁾	General Requirements and Section 14c

Wet Batch Plants (Central-Mix)

	<i>Control Equipment on Mixer Loading</i>	<i>Operating Limits and Requirements</i>
<input type="checkbox"/>	Enclosure Only ⁽¹⁾	General Requirements and Section 14d
<input type="checkbox"/>	Baghouse	General Requirements and Section 14e

⁽¹⁾ A concrete batch plant that does not have a baghouse on the truck loadout or mixer loading point must install an enclosure meeting the requirements in Section 14 to qualify for a permit using the general permit template.

⁽²⁾ If a facility has a baghouse with a stack height between 20 feet and 37 feet, the stack can be raised to 37 feet or higher and the facility can comply with the requirements of Section 14c. If the facility does not choose to raise the stack, they can comply with the requirements of Section 14b.

Permittee Certification

I certify that, based on information and belief formed after reasonable inquiry, the enclosed documents including the attachments are true, accurate, and complete and that legal entitlement to install and operate the equipment covered by the permit application and on the property identified in the permit application has been obtained.

I certify that this permit, as drafted, is for (and only for) a “concrete batch plant” not otherwise “excluded” as noted below. I certify that there are no physical or chemical characteristics or pollutants in the air contaminants emitted for this facility which are atypical of this type of facility.

I certify that the terms and conditions of this permit will be met at all times.

_____ Responsible Party – Signature

_____ Date

_____ Title

Equipment List

Production Equipment Type	Production Equipment Make	Production Equipment Model	Production Equipment Serial Number or Company ID	Associated Control Equipment Serial Number or Company ID	Construction Date
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
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_____	_____	_____	_____	_____	_____

PERMIT CONDITIONS

The permit holder, owner or operator of the facility shall assure that the installation, operation, and maintenance of this equipment is in compliance with all of the applicable conditions of this permit and all other applicable requirements. A facility not meeting any of the requirements set forth in this permit shall apply for a permit to construct as outlined in IAC 22.1(3).

1. Departmental Review

This permit is valid only after signature by the Iowa Department of Natural Resources staff.

This permit is issued based on the permittee's certification of the information submitted and certification that the terms and conditions in this permit will be met at all times. Any misinformation, false statements or misrepresentations by the applicant shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. A typical concrete batch plant facility has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20-31; and 40 CFR Parts 51, 52, 60, 61 and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential for that equipment for reducing air contaminant emissions. The DNR 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.

2. Transferability

This permit is for the construction and operation of the specific emission unit(s), control equipment and emission point as described in this permit. As limited by 567 IAC 22.3(3)"f", this permit is not transferable from one concrete batch plant facility to another. This permit is also not transferable from one location to another unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the DNR shall be notified in writing as set forth in Condition 8. The owner will be notified at least thirty (30) days prior to the scheduled relocation by the department if the relocation will cause, or contribute to, a violation of the National Ambient Air Quality Standards. In such case, a supplemental permit shall be required for further operation as well as prior to the initiation of construction of additional control equipment or equipment modifications needed to meet the standards.

This permit is for the construction and operation of the specific emission unit(s), control equipment and emission point(s) as described in this permit and the application for this 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 compliance with the provisions of the permit. No person shall construct, install, reconstruct or alter this emission unit, control equipment or emission point without the required revision to this permit. A permit may be updated to reflect a change in equipment by modifying the Equipment List on page 4 of this permit template and sending a copy to the Department for review. The equipment may be updated as long as the change in equipment still meets the required emission unit and point characteristic descriptions.

3. Construction

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

This permit shall become void if any one of the following conditions occur:

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

3.a. Original Permits

The owner or operator shall obtain a new permit if any changes are made to the final plans and specifications submitted for the proposed project.

3.b. Modified or Supplemental Permits

This permit supersedes any and all previous permits issued for the emission point(s) or emission unit(s) permitted herein. However, the permittee may continue to act under the provisions of the previous permit for the emission point(s) or emission unit(s) until one of the following conditions occurs:

- (1) The proposed project authorized by this permit is completed as it affects the emission point(s) permitted herein; or
- (2) The permit becomes void.

The owner or operator shall obtain a new permit if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

A permit may be updated to reflect a change in equipment by modifying the Equipment List on page 4 of this permit template and sending a copy to the Department for review. The equipment may be updated as long as the change in equipment still meets the required emission unit and point characteristic descriptions.

4. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part 60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 34.

5. Owner Responsibility

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. This permit does not relieve the owner or operator of meeting all applicable requirements set forth in 567- Chapters 20 through 25, Chapter 28 and Chapter 33 of the Iowa Administrative Code.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "*Maintenance and Repair*".

6. Excess Emissions

Excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if the startup, shutdown, or cleaning of control equipment is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise.. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one six-minute period per one-hour period. An incident of excess emissions other than the above 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 shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported to the appropriate DNR field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident. A written report of an incident of excess emissions shall be submitted as a follow-up to all required oral reports within seven (7) days of the onset of the upset condition.

7. Disposal of Contaminants

The disposal of materials collected by the control equipment shall meet all applicable rules.

8. Notification, Reporting and Recordkeeping

- A. The owner shall furnish the DNR the following written notifications:
1. The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
 2. The actual date of startup, postmarked within fifteen (15) days following the start of operation;
 3. Transfer of equipment ownership, within 30 days of the occurrence
 4. Any facility that relocates must file a **relocation notification** with the department on DNR Form 542-1362. The relocation notification shall be submitted to the department 30 days prior to the relocation of any concrete batch plant.
 5. The date of each compliance test required by Permit Condition 12, at least thirty (30) days before the anticipated compliance test date.
 6. The date of each pretest meeting, at least fifteen (15) days before the proposed meeting date. The owner shall request a proposed test plan protocol questionnaire at least sixty (60) days prior to each compliance test date. The completed questionnaire shall be received by the DNR at least fifteen (15) days before the pretest meeting date.
- B. The owner shall furnish DNR with the following reports:
1. Oral excess emissions reports, in accordance with 567 IAC 24.1.
 2. Operation of this emission unit(s) or control equipment outside of those limits specified in Permit Conditions 10 and 14 and according to the schedule set forth in 567 IAC 24.1.
 3. A written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than forty-five (45) days 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. The owner shall send correspondence **regarding this permit** to the following address:

Construction Permit Supervisor
Air Quality Bureau
Iowa Department of Natural Resources
7900 Hickman Rd, Ste 1
Windsor Heights, IA 50324
Telephone: 515-725-9549
Fax: 515-725-9501

- D. The owner shall send correspondence **concerning emission testing** to:

Stack Testing Coordinator
Air Quality Bureau
Iowa Department of Natural Resources
7900 Hickman Rd, Ste 1
Windsor Heights, IA 50324
Telephone: 515-725-9545
Fax: 515-725-9502

- E. The owner shall **send reports and notifications** to:

Compliance Unit Supervisor
Air Quality Bureau
Iowa Department of Natural Resources
7900 Hickman Rd, Ste 1
Windsor Heights, IA 50324
Telephone: 515-725-9550
Fax: 515-725-9502

8. Notification, Reporting and Recordkeeping (Continued)

F. 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.

9. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and 2 years in jail according to Iowa Code Section 455B.146A.

10. Emission Limits

Pollutant	lb/hr ⁽¹⁾	Tons/Yr ⁽²⁾	Additional Limits	Reference (567 IAC)
Particulate Matter (PM)	NA	NA	0.1 gr/dscf ⁽³⁾	23.3(2)"a"
			0.6 lb/MMBTU ⁽⁴⁾	23.3(2)"b"
PM ₁₀	NA	NA	NA	NA
Opacity	NA	NA	40% ⁽⁵⁾	23.3(2)"d"
			No Visible Emissions ⁽⁶⁾	23.3(2)"c"
Sulfur Dioxide (SO ₂)	NA	NA	2.5 lb/MMBTU ⁽⁷⁾	23.3(3)"b"
			500 ppm _v ⁽⁸⁾	23.3(3)"e"
Nitrogen Oxides (NO _x)	NA	NA	NA	NA
Volatile Organic Compounds	NA	NA	NA	NA
Carbon Monoxide (CO)	NA	NA	NA	NA

⁽¹⁾ Standard is expressed as the average of 3 runs.

⁽²⁾ Standard is a 12-month rolling total.

⁽³⁾ This standard applies to all emission units from the concrete batch plant except those units used for indirect heating or power generation.

⁽⁴⁾ This standard applies to those emission units used for indirect heating.

⁽⁵⁾ An exceedance of the indicator opacity of (25%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽⁶⁾ The facility 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. A list of reasonable precautions is detailed in Section 16.

⁽⁷⁾ This standard applies to the emissions of sulfur dioxide from the use of liquid fuels.

⁽⁸⁾ This standard applies to all other processes, other than from the use of liquid fuels, that are capable of emitting sulfur dioxide.

11. Emission Unit and Point Characteristics

The number of emission units at the facility and the stack parameters of the emission points shall conform to the following list.

Maximum number of Emission Units.

- A. A maximum of six (6) silos storing cement or cement supplement shall be located at the plant.
- B. Any number of elevated aggregate bins; only one (1) bin may be filled at any one time.
- C. Any number of aggregate load-in hoppers and conveyers; only one (1) load-in hopper and conveyor may be used to transport aggregate or sand to the elevated bins at any one time or only one (1) front end loader may be used to load multiple conveyers at any one time.
- D. A maximum of either one (1) truck loadout point for dry batch plants or one (1) mixer for wet batch plants shall be located at the plant.
- E. A maximum of one (1) cement weigh hopper or weigh batcher.

11. Emission Unit and Point Characteristics (Continued)

- F. A maximum of one (1) aggregate weigh hopper.
- G. A maximum of one (1) boiler may be located at the plant. The boiler shall have a maximum heat input rating of 10 million BTU per hour or less and shall be limited to using either natural gas or propane.
- H. A maximum of one (1) electric generator. The generator may be of any size but shall be limited to using diesel fuel.

Emission control and Stack Requirements

- I. Emissions from each cement or cement supplement silo shall be controlled by a baghouse. Minimum stack height for any cement or cement supplement silo shall be 37 feet.
- J. The minimum stack height of the baghouse on truck loadout shall be at least 20 feet above grade if complying with the requirements of Section 14b or 37 feet above grade if complying with the requirements of Section 14c.
- K. The minimum stack height of the baghouse on the mixer loading shall be at least 37 feet above grade if complying with the requirements of Section 14e.
- L. The stack heights of the boiler and generator shall be a minimum of 15 feet above grade and the stack(s) shall be vertical, unobstructed.
- M. The stacks from the silos, mixer and truck loadout may be of any orientation, including vertical, vertical unobstructed, obstructed, horizontal or downward.

It shall be the owner's responsibility to ensure that construction conforms to the emission point characteristics stated above. If it is determined that any of the emission point characteristics are different than stated above, the owner must notify the Department and obtain a permit amendment, if required. A concrete batch plant not meeting any of the requirements described above shall apply for a permit to construct as outlined in IAC 22.1(3).

12. Initial Performance Testing Requirements

The department retains authority pursuant to 567—subrule 25.1(7) to require additional emission testing.

Pollutant	Testing Required	Test Method
PM	No	Iowa Compliance Sampling Manual Method 5
PM ₁₀	No	40 CFR 51, Appendix M, 201A with 202
Opacity	No	40 CFR 60, Appendix A, Method 9
SO ₂	No	40 CFR 60, Appendix A, Method 6C
NO _x	No	40 CFR 60, Appendix A, Method 7E
VOC	No	40 CFR 60, Appendix A, Method 25A
CO	No	40 CFR 60, Appendix A, Method 10
Pb	No	40 CFR 60, Appendix A, Method 12

If specified in the table above, the owner shall verify compliance with the emission limitations contained in Permit Condition 10 within 60 days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment. The unit(s) being sampled should be operated in a normal manner at the maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which this unit(s) will be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that this unit(s) has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether this unit(s) is in compliance.

A pretest meeting shall be held at a mutually agreeable site no less than fifteen (15) days prior to the date of each test. Representatives from the DNR 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. The owner shall be responsible for the installation and maintenance of test ports. The DNR shall reserve the right to impose additional, different, or more detailed testing requirements.

Each emissions compliance test must be approved by the DNR. Unless otherwise specified by the DNR, each test shall consist of three separate runs. The duration of each run shall be established by the DNR at the pretest meeting. The arithmetic mean of three acceptable test runs shall apply for compliance, unless otherwise indicated by the DNR. The test methods to be used are those stated above unless otherwise approved by the DNR.

13. NSPS and NESHAP Applicability

Diesel generators where the engine was ordered after July 11, 2005 and manufactured after April 1, 2006 are subject to NSPS Subpart IIII of 40 CFR Chapter 60 – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. Diesel generators which were modified or reconstructed after July 11, 2005 are subject to Subpart IIII of 40 CFR Chapter 60. Diesel generators with a displacement less than 30 liters per cylinder where the model year is 2007 or later are subject to Subpart IIII of 40 CFR Chapter 60.

Storage tanks of petroleum liquids may also be subject to the requirements of one of three NSPS subparts as follows:

NSPS Subpart K: Storage tanks were constructed, reconstructed or modified after June 11, 1973 and prior to May 19, 1978 and have a minimum storage capacity of 40,000 gallons.

NSPS Subpart Ka: Storage tanks were constructed, reconstructed or modified after May 18, 1978 and prior to July 23, 1984 and have a minimum storage capacity of 40,000 gallons.

NSPS Subpart Kb: Storage tanks were constructed, reconstructed or modified after July 23, 1984 and have a minimum storage capacity of 19,813 gallons storing a liquid with a true maximum vapor pressure greater than or equal to 15 kPa or if the storage tank is greater than 39,890 gallons storing a liquid with a true maximum vapor pressure greater than or equal to 3.5 kPa.

No NESHAP standards are applicable to this facility.

14. Operating Limits

The facility shall follow all of the general requirements for concrete batch plants *and* the operating limits for the specific type of facility selected on Page 3 of this permit template. If the facility has a diesel generator subject to New Source Performance Standard (NSPS) Subpart IIII, they must also follow the requirements for generators subject to NSPS Subpart IIII.

General Requirements for all Concrete Batch Plants

- A. The generator is limited to firing either #1 or #2 diesel fuel with a maximum sulfur content of 0.5% by weight per 567 IAC 23.3(3)"b".
- B. The amount of diesel fuel fired in the generator shall not exceed 35 gallons per hour for generators equal to or less than 600 horsepower and 50 gallons per hour for generators greater than 600 horsepower.
- C. The diesel generator shall be limited to operating for no more than 4,850 hours per rolling 12-month period.
- D. The maximum heat input of the boiler shall not exceed 10 MMBTU/hr.
- E. The boiler is limited to firing either natural gas or propane.
- F. The owner or operator shall maintain all baghouses according to manufacturer's specifications and maintenance schedule. If visible emissions are observed from any baghouse, the owner or operator shall identify the cause of the visible emissions and take corrective action immediately.

Requirements for Diesel Generators subject to NSPS Subpart IIII

- A. The owner or operator of a generator subject to NSPS Subpart IIII shall follow the emission standards for the type and size of diesel generator installed as required in 40 CFR§60.4204.
- B. Beginning October 1, 2007, diesel fuel fired in a generator subject to NSPS Subpart IIII shall be limited to a maximum sulfur content of 500 ppm and a minimum centane index of 40 or a maximum aromatic content of 30 percent by volume per 40 CFR§80.510(a).
- C. Beginning October 1, 2010, diesel fuel fired in a generator subject to NSPS Subpart IIII and with a displacement less than 30 liters per cylinder shall be limited to a maximum sulfur content of 15 ppm and a minimum centane index of 40 or a maximum aromatic content of 30 percent by volume per 40 CFR§80.510(b).
- D. Per 40 CFR§60.4207, owners and operators of pre-2011 model year diesel generators subject to NSPS Subpart IIII may petition the Administrator for approval to use remaining non-compliant fuel that does not meet the fuel requirements of 40 CFR§80.510(a) or CFR§80.510(b) beyond the dates required, for the purpose of using up existing fuel inventories.

14a. Dry Batch (Truck-Mix) Facilities without Baghouse Control on Truck Loadout

- A. This type of concrete batch plant shall not produce more than 648 cubic yards of concrete in any calendar day.
- B. The truck loadout shall be enclosed by either of the following methods:
 - 1. **Back-In Operations** – The truck loadout shall be roofed and permanently enclosed on the three (3) sides not used to enter the loadout area by the mix truck.
 - 2. **Drive-Through Operations** – The truck loadout shall be roofed and permanently enclosed on the two (2) sides not used to enter the loadout area by the mix truck. The other two (2) drive-through sides must either be equipped with dust tarps that are lowered each time a truck is filled or with drive-through plastic strips. If a facility uses plastic strips, they must be replaced periodically when they become warped or damaged or are otherwise not providing an effective enclosure.

14b. Dry Batch (Truck-Mix) Facilities with Baghouse Control on Truck Loadout and a Stack Height between 20 Feet Above Grade and 37 Feet Above Grade

- A. This type of concrete batch plant shall not produce more than 2,900 cubic yards of concrete in any calendar day.

14c. Dry Batch (Truck-Mix) Facilities with Baghouse Control on Truck Loadout and a Stack Height of 37 Feet Above Grade or Higher

- A. This type of concrete batch plant shall not produce more than 4,260 cubic yards of concrete in any calendar day.

14d. Wet Batch (Central-Mix) Facilities without Baghouse Control on Mixer Loading

- A. This type of concrete batch plant shall not produce more than 3,240 cubic yards of concrete in any calendar day.
- B. The mixer loading point shall either be enclosed in a process building or other type of permanent enclosure.

14e. Wet Batch (Central-Mix) Facilities with Baghouse Control on Mixer Loading

- A. This type of concrete batch plant shall not produce more than 5,790 cubic yards of concrete in any calendar day.

15. Operating Condition Monitoring

All records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. Record each day, the amount of concrete produced from the plant in cubic yards.
- B. Retain vendor's certification of the sulfur content for the diesel fuel used in the generator.
- C. Record monthly the total amount of time the generator operates in hours. Calculate and record rolling 12-month totals.
- D. Keep a record of the horsepower rating of the diesel generator and the maximum hourly fuel capacity of the generator,
- E. Keep a record of the maximum heat input rating of the boiler and the type of fuel fired in the boiler.
- F. The owner or operator shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the baghouse(s).
- G. The owner or operator of a generator subject to NSPS Subpart IIII shall follow the monitoring requirements of 40 CFR§60.4209.
- H. The owner or operator of a generator subject to NSPS Subpart IIII shall follow the notification, reporting, and recordkeeping requirements of 40 CFR§60.4214.
- I. The owner or operator of a generator subject to NSPS Subpart IIII shall follow the compliance requirements of 40 CFR§60.4211.

16. Best Management Practices (BMP)

All concrete batch plants covered under this permit are required to employ best management practices 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. These BMP are examples of reasonable practices to minimize the generation of fugitive dust emissions.

BMP on process equipment include but are not limited to:

- Limit drop heights of materials being transferred to or from any conveyor
- Enclose all free falling transfer points from conveyor to stockpiles with chute(s)
- Totally enclose all conveyors
- Provide scrapers at the turning points of all conveyors to prevent dust collection on the belt surface
- If using unenclosed elevated aggregate storage bins, do not load aggregate within two (2) feet of the top of the bin walls.

BMP on haul roads include but are not limited to:

- Limiting truck speed on 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

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

17. Descriptions of Terms and Acronyms

acfm	Actual cubic feet per minute
Applicant	The owner, company official or authorized agent
BTU	British thermal unit
CFR	Code of Federal Regulations
Department	Iowa Department of Natural Resources
DNR	Iowa Department of Natural Resources
gr/dscf	Grains per dry standard cubic foot
HAP	Hazardous Air Pollutant(s)
IAC	Iowa Administrative Code
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NO _x	Nitrogen Oxides
Owner	The owner or authorized representative
Permit	This document, including permit conditions and all submitted application materials
PM ₁₀	Particulate Matter equal to or less than 10 microns in aerodynamic diameter
scfm	Standard cubic feet per minute
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide
VOC	Volatile Organic Compound

END OF PERMIT CONDITIONS