

217/782-2113

AUTHORIZATION TO OPERATE
UNDER A GENERAL PERMIT

PERMITTEE

FILL_ADDRESS_IN

General Permit No.: G1400B

Application No.: FILL_NO._IN

I.D. No.: FILL_NO._IN

Applicant's Designation:

Date Received: FILL_DATE_IN

Type of Source: Large Aggregate Processing Plant

Date Issued: FILL_DATE_IN

Expiration Date: See Condition 1.

Source Location: FILL_LOCATION ADDRESS_IN

Authorization is hereby granted to the above-designated Permittee to operate the above source, consisting of an aggregate processing plant comprised of up to seventeen (17) crushers, up to twenty-seven (27) screens, and up to 200 conveyors and bins with associated transfer points under a General Permit for a large aggregate processing plant, pursuant to the above-referenced application.

If you have any questions regarding this authorization, please contact FILL_PERMIT ENGINEER_IN at 217/782-2113.

Edwin C. Bakowski, P.E.
Manager, Permit Section
Division of Air Pollution Control

Date Signed: _____

ECB:FILL_INITIALS_IN

cc: Region FILL_NO._IN

217/782-2113

**LIFETIME GENERAL OPERATING PERMIT
FOR LARGE AGGREGATE PROCESSING PLANT -- NSPS SOURCE**

Permit No.: G1400B
Subject: Large Aggregate Processing Plant
Expiration Date: See Condition 1

This permit is hereby granted to OPERATE a large aggregate processing plant as specified below in Findings 1, 2, and 3. To receive authorization to operate under this General Permit, the owner or operator of a source must submit an application, as described in Finding 4, to the Illinois EPA. Authorization, if granted, will be transmitted by letter. A copy of this permit will be included.

Findings

1. This general permit is applicable to aggregate processing plants that meet all of the following criteria:
 - a.
 - i. The sum of all materials processed by the aggregate processing plant does not exceed 952,000 tons per month and 9,520,000 tons per year.
 - ii. In lieu of natural moisture, water sprays are used on the emission units associated with the aggregate processing plant (crushers, conveyors and bins with associated transfer points, and stockpiles) to produce a moisture content of 1.5% by weight or higher in order to control particulate matter emissions, rather than by capture systems and collection devices.
 - iii. All normal traffic pattern access areas surrounding storage piles and all normal traffic pattern roads and parking facilities which are located on the property are paved or treated with water, oils or chemical dust suppressants. All paved areas are cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants have the treatment applied on a regular basis, or as needed basis.
 - b.
 - i. The sum of all materials processed by the crushers associated with the aggregate processing plant does not exceed 1,904,000 tons per month and 19,040,000 tons per year.
 - ii. The sum of all materials processed by the screens associated with the aggregate processing plant does not exceed 3,665,200 tons per month and 36,652,000 tons per year.
 - iii. The sum of all materials transferred by the conveyors and transfer points associated with the aggregate processing plant does not exceed 40,355,280 tons per month and 403,552,800 tons per year.

- c. The source constitutes an aggregate processing plant which includes facilities performing the following operations: crushing, screening, storage and transfer of nonmetallic minerals, such as stone, sand and gravel, recycled concrete and asphalt, etc.
 - d. Other company owned facilities, such as concrete batch or asphalt mix plants, or any other process units, are not operated at the aggregate processing plant unless such emission units are exempted from permitting requirements pursuant to 35 IAC 201.146.
2. For purposes of this permit, an affected aggregate processing plant includes all aggregate transfer, weigh-hopper loading, loading and transferring at the site and is one that does not exceed:
 - a. Seventeen (17) crushers;
 - b. Twenty-seven (27) screens; and
 - c. 200 conveyors and bins with associated transfer points.
3. This permit imposes conditions on activities at the affected aggregate processing plant to assure compliance with applicable requirements of:
 - a. 40 CFR Part 60, Subparts A and 000; and/or
 - b. 35 IAC Part 212, Subparts K and L.
4. This permit does not excuse the Permittee from obtaining a Construction Permit and/or an Operating Permit for any additional emission units in excess of those units specified in Finding 2.
5. The Illinois EPA will only authorize operation pursuant to this permit if an application includes the following items:
 - a. A description and location identifying the aggregate processing plant.
 - b. A statement certifying that the aggregate processing plant meets the criteria in Finding 1.
 - c. A request for authorization to operate pursuant to this general permit.
 - d. A statement that the aggregate processing plant is, and will be, operated to comply with 40 CFR Part 60, Subparts A and 000 (if applicable); 35 IAC Part 212, Subparts K and L and the Conditions of this permit.
 - e. A signed certification by the applicant that the information contained in the application is accurate.

6. This permit is issued to limit the emissions particulate matter (PM) and all other pollutants from the source to less than 100 tons per year for the purposes of the Air Pollution Operating Permit Fee under Section 9.6(b)(1) of the Illinois Environmental Protection Act (Act). The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

Conditions

This permit is subject to both the standard conditions attached hereto and the following special condition(s):

1. Source Description
 - a. This permit shall expire 180 days after the Illinois EPA sends a written request for the renewal of this permit.
 - b. This permit shall terminate if it is withdrawn or is superseded by a revised permit.
 - c. This permit supersedes all operating permit(s) issued for this location.
 - d. This permit allows the operation and construction of additional emission units of an affected aggregate processing plant (including all aggregate transfer, weigh-hopper loading, loading and transferring at the site) not to exceed:
 - i. Seventeen (17) crushers;
 - ii. Twenty-seven (27) screens; and
 - iii. 200 conveyors and bins with associated transfer points.
 - e. This permit does not exempt the Permittee from obtaining a Construction and/or Operating Permit for any additional emission units in excess of those units specified in Condition 1(d), unless such emission units or operations are already exempted from permitting requirements pursuant to 35 IAC 201.146 and does not affect the source's status with respect to the applicability of Section 39.5 of the Illinois Environmental Protection Act.
2. Applicability Provisions and Applicable Regulations
 - a. Each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station that commences construction, reconstruction, or modification after August 31, 1983 are subject to the provisions of the New Source Performance Standards (NSPS) for Nonmetallic Mineral Processing Plants, 40 CFR 60 Subparts A and 000.

- i. Pursuant to 40 CFR 60.670(a)(2), the provisions of 40 CFR 60 Subpart 000 do not apply to all facilities located in underground mines; plants without crushers or grinding mills above ground; and wet material processing operations (as defined in 40 CFR 60.671).
- ii. Pursuant to 40 CFR 60.670(c), Facilities at the following plants are not subject to the provisions of 40 CFR 60 Subpart 000:
 - A. Fixed sand and gravel plants and crushed stone plants with capacities, as defined in 40 CFR 60.671, of 23 megagrams per hour (25 tons per hour) or less; and
 - B. Portable sand and gravel plants and crushed stone plants with capacities, as defined in 40 CFR 60.671, of 136 megagrams per hour (150 tons per hour) or less.
- iii. On and after the date on which the performance test required to be conducted by Condition 5(a)(i) (see also 40 CFR 60.8) is completed, no owner or operator subject to the provisions of Condition 2(a) (see also 40 CFR 60 Subpart 000) shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which contain particulate matter in excess of the limits in Table 2 of 40 CFR Part 60 Subpart 000 [40 CFR 60.672(a)].
- iv. Pursuant to 40 CFR 60.672(b), no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any transfer point on belt conveyors, any crusher, at which a capture system is not used, or from any other affected facility any fugitive emissions which exhibit greater opacity in excess of the limits of Table 3 of 40 CFR Part 60 Subpart 000, except as provided in 40 CFR 60.672(d) and (e).
- v. Pursuant to 40 CFR 60.672(d), truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of 40 CFR 60.672.
- vi. Pursuant to 40 CFR 60.672(e), if any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in Conditions 2(a)(iii) and 2(a)(iv) (see also 40 CFR 60.672(a) and (b)), or the building enclosing the affected facility or facilities must comply with the following emission limits:

- (A) Fugitive emissions from the building openings (except for vents as defined in 40 CFR 60.671) must not exceed 7 percent opacity; and
 - (B) Vents (as defined in 40 CFR 60.671) in the building must meet the applicable stack emission limits and compliance requirements in Table 2 of 40 CFR Part 60 Subpart 000.
- vii. Any baghouse that controls emissions from only an individual, enclosed storage bin is exempt from the applicable stack PM concentration limit (and associated performance testing) in Table 2 of 40 CFR Part 60 Subpart 000 but must meet the applicable stack opacity limit and compliance requirements in Table 2 of 40 CFR Part 60 Subpart 000. This exemption from the stack PM concentration limit does not apply for multiple storage bins with combined stack emissions.

b. Particulate Matter Standards

- i. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, pursuant to 35 IAC 212.123(a), except as allowed by 35 IAC 212.123(b) and 212.124.
- ii. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
- iii. Should this stationary source, as defined in Attachment B (see also 35 IAC 212.302) become subject to the requirement to prepare and submit an operating program for fugitive particulate matter as set forth in 35 IAC 212.309, then this source shall be operated under the provisions of such an operating program prepared by the Permittee and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions from the emission units described in Condition 2(b)(iii)(A) through 2(b)(iii)(C) and 2(b)(iv) (see also 35 IAC 212.304 through 212.308 and 212.316).

A. Traffic Areas: All normal traffic pattern roads and parking facilities which are located on mining or

manufacturing property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Conditions 2(b)(iii) and Condition 2(b)(iii)(D) and (E) (see also 35 IAC 212.309, 212.310 and 212.312) [35 IAC 212.306].

B. Materials Collected by Pollution Control Equipment:

All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods [35 IAC 212.307].

C. Spraying or Choke-Feeding Required: Crushers, grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program [35 IAC 212.308].

D. Minimum Operating Program: Pursuant to 35 IAC 212.310, at a minimum the operating program shall include the following:

- I. The name and address of the source [35 IAC 212.310(a)];
- II. The name and address of the owner or operator responsible for execution of the operating program [35 IAC 212.310(b)];
- III. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source [35 IAC 212.310(c)];
- IV. Location of unloading and transporting operations with pollution control equipment [35 IAC 212.310(d)];
- V. A detailed description of the best management practices utilized to achieve compliance with this Subpart, including an engineering

specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized [35 IAC 212.310(e)];

VI. Estimated frequency of application of dust suppressants by location of materials [35 IAC 212.310(f)]; and

VII. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program [35 IAC 212.310(g)].

E. Amendment to Operating Program: The operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with Condition 2(b)(iii) (see also 35 IAC Part 212 Subpart K) and shall be submitted to the Illinois EPA for its review [35 IAC 212.312].

iv. Emissions Limitations for Emission Units in Certain Areas

A. Applicability. This Condition shall apply to those operations specified in Condition 2(b)(iii) and Attachment B (see also 35 IAC 212.302) and that are located in areas defined in Attachment C (see also 35 IAC 212.324(a)(1)) (e.g., McCook, Lake Calumet, and Granite City) [35 IAC 212.316(a)].

B. Emission Limitation for Crushing and Screening Operations. No person shall cause or allow fugitive particulate matter emissions generated by the crushing or screening of slag, stone, coke or coal to exceed an opacity of 10 percent [35 IAC 212.316(b)].

C. Emission Limitations for Roadways or Parking Areas. No person shall cause or allow fugitive particulate matter emissions from any roadway or parking area to exceed an opacity of 10 percent, except that the opacity shall not exceed 5 percent at quarries with a capacity to produce more than 1 million T/yr of aggregate [35 IAC 212.316(c)].

D. Emission Limitations for Storage Piles. No person shall cause or allow fugitive particulate matter emissions from any storage pile to exceed an opacity of 10 percent, to be measured four ft from the pile surface [35 IAC 212.316(d)].

E. Emission Limitation for All Other Emission Units. Unless an emission unit has been assigned a particulate matter, PM₁₀, or fugitive particulate matter emissions limitation elsewhere in this Condition or in 35 IAC Part 212 Subparts R or S, no person shall cause or allow fugitive particulate matter emissions from any emission unit to exceed an opacity of 20 percent [35 IAC 212.316(f)].

v. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].

vi. Sources located in certain areas designated in 35 IAC 212.324(a)(1) (e.g., McCook, Lake Calumet, and Granite City) shall comply with the following requirements:

A. General Emission Limitation. Except as otherwise provided in 35 IAC 212.324, no person shall cause or allow the emission into the atmosphere, of PM₁₀, from any process emission unit to exceed 68.7 mg/scm (0.03 gr/scf) during any one hour period [35 IAC 212.324(b)].

B. Exceptions. The mass emission limits contained in 35 IAC 212.324(b) shall not apply to those emission units with no visible emissions other than fugitive particulate matter; however, if a stack test is performed, this Condition is not a defense finding of a violation of the mass emission limits contained in 35 IAC 212.324(b) [35 IAC 212.324(d)].

vii. Should this stationary source, as defined in 35 IAC 212.700, become subject to the requirement to prepare and submit a contingency measure plan reflecting the PM₁₀ emission reductions as set forth in 35 IAC 212.703, then the owner or operator shall submit such plan to the Illinois EPA for review and approval within ninety (90) days after the date this source becomes subject to this requirement. Such plan will be incorporated by reference into this permit and shall be implemented in accordance with 35 IAC 212.704. The source shall comply with the applicable requirements of 35 IAC Part 212, Subpart U.

3. Operational Limits and Work Practice Requirements

- a. The Permittee shall maintain and operate the affected aggregate processing plant, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions pursuant to 40 CFR 60.11(d).
- b. Maintenance and Repair. Pursuant to 35 IAC 212.324(f), for any process emission unit subject to 35 IAC 212.324(a) (i.e., sources located in McCook, Lake Calumet, or Granite City), the owner or operator shall maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards in Condition 2(b)(vi) (see also 35 IAC 212.324) shall be met at all times. This Condition shall not affect the applicability of 35 IAC 201.149. Proper maintenance shall include the following minimum requirements:
 - i. Visual inspections of air pollution control equipment [35 IAC 212.324(f)(1)];
 - ii. Maintenance of an adequate inventory of spare parts [35 IAC 212.324(f)(2)]; and
 - iii. Expeditious repairs, unless the emission unit is shutdown [35 IAC 212.324(f)(3)].
- c. The surface moisture content of the aggregate to be processed by the affected aggregate processing plant shall be at least 1.5% by weight. The Permittee shall show compliance with this requirement as follows:
 - i. In lieu of natural moisture, water sprays shall be used on the emission units associated with the crushing plant (e.g., crushers, conveyors, and stockpiles, etc.) as necessary, except when weather conditions are below or expected to fall below freezing temperatures, to produce a moisture content of 1.5% by weight or higher to reduce particulate matter emissions and to maintain compliance with the applicable visible emissions standards for each piece of processing equipment used in the production process; or
 - ii. Water saturated materials mined below the water table are being processed;
 - iii. Demonstrate compliance with Condition 3(c) by following the testing requirements of Condition 5(d).
 - iv. All normal traffic pattern access areas surrounding storage piles and all normal traffic pattern roads and parking facilities which are located on the property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust

suppressants shall have the treatment applied on a regular basis, or as needed basis.

4. Emission Limitations

a. Emissions and operation of the affected aggregate processing plant shall not exceed the following limits:

i. Total Aggregate throughput of the affected aggregate processing plant:

<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
952,000	9,520,000

ii. Aggregate throughput for each type of process at the affected aggregate processing plant:

<u>Item of Equipment</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Seventeen (17) Crushers	1,904,000	19,040,000
Twenty-seven (27) Screens	3,665,200	36,652,000
200 Conveyors and Bins/Transfer Points	40,355,280	403,552,800

iii. Emissions of Particulate Matter (PM) and Particulate Matter lees than 10 Microns (PM₁₀) from the affected aggregate processing plant:

<u>Item of Equipment</u>	<u>PM Emissions</u>			<u>PM₁₀ Emissions</u>		
	<u>(Lb/Ton)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>	<u>(Lb/Ton)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
17 Crushers	0.0012	1.14	11.42	0.00054	0.51	5.14
27 Screens	0.0022	4.03	40.32	0.00074	1.36	13.56
200 Conveyors and Bins	0.00014	2.82	<u>28.25</u>	0.000046	0.93	<u>9.28</u>
		Totals	79.99			27.98

iv. These limits are based on representations of the maximum aggregate throughput and standard, controlled AP-42 emission factors.

b. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

5. Testing Requirements

a. The Permittee shall perform all applicable testing for the affected aggregate processing plant as specified by 40 CFR 60.8 and 60.675 including the following:

- i. Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s) [40 CFR 60.8(a)].
- ii. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:
 - A. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology [40 CFR 60.8(b)(1)];
 - B. Approves the use of an equivalent method [40 CFR 60.8(b)(2)],
 - C. Approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance [40 CFR 60.8(b)(3)];
 - D. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard [40 CFR 60.8(b)(4)]; or
 - E. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act [40 CFR 60.8(b)(5)].
- iii. Performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit

unless otherwise specified in the applicable standard [40 CFR 60.8(c)].

- iv. The owner or operator of an affected facility shall provide the Illinois EPA or USEPA at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Illinois EPA or USEPA the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Illinois EPA or USEPA as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Illinois EPA or USEPA by mutual agreement [40 CFR 60.8(d)].
- v. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:
 - A. Pursuant to 40 CFR 60.8(e)(1), sampling ports adequate for test methods applicable to such facility. This includes:
 - I. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test 1 methods and procedures [40 CFR 60.8(e)(1)(i)]; and
 - II. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures [40 CFR 60.8(e)(1)(ii)].
 - B. Safe sampling platform(s) [40 CFR 60.8(e)(2)].
 - C. Safe access to sampling platform(s) [40 CFR 60.8(e)(3)].
 - D. Utilities for sampling and testing equipment [40 CFR 60.8(e)(4)].
- vi. Unless otherwise specified in the applicable subpart of 40 CFR Part 60, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard under 40 CFR Part 60. For the purpose of determining compliance with an applicable standard under 40 CFR Part 60, the arithmetic

means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Illinois EPA's or USEPA's approval, be determined using the arithmetic mean of the results of the two other runs [40 CFR 60.8(f)].

- vii. In conducting the performance tests required in Condition 5(a)(i) (see also 40 CFR 60.8), the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in this section, except as provided in Condition 5(a)(ii) (see also 40 CFR 60.8(b)) [40 CFR 60.93(a)].
 - viii. In conducting the performance tests required in Condition 5(a)(i) (see also 40 CFR 60.8), the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR Part 60 or other methods and procedures as specified in this section, except as provided in Condition 5(a)(ii) (see also 40 CFR 60.8(b)). Acceptable alternative methods and procedures are given in Condition 5(a)(xiii) (see also 40 CFR 60.675(e)) [40 CFR 60.675(a)].
 - ix. The owner or operator shall determine compliance with the particulate matter standards in accordance with the requirements of 40 CFR 60.675.
- b. Pursuant to 35 IAC 212.107, 212.109, and 212.110, testing for particulate matter emissions shall be performed as follows:
- i. For both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR Part 60, Appendix A, incorporated by reference in 35 IAC 212.113, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. This Condition shall not apply to 35 IAC 212.301 [35 IAC 212.107].
 - ii. Except as otherwise provided in 35 IAC Part 212, and except for the methods of data reduction when applied to 35 IAC 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675, if applicable, incorporated by reference in 35 IAC 212.113,

except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged [35 IAC 212.109].

- iii. Measurement of particulate matter emissions from stationary emission units subject to 35 IAC Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E [35 IAC 212.110(a)].
 - iv. The volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4 [35 IAC 212.110(b)].
 - v. Upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 IAC Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA [35 IAC 212.110(c)].
- c. Testing required by Conditions 5(a) and (b) shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing.
 - d. The moisture content of a representative sample of the aggregate processed in the affected aggregate processing plant shall be measured at least one per week using ASTM Procedures (C566-97) for total moisture content of material.
6. Inspection and Monitoring Requirements
- a. The Permittee shall perform all applicable monitoring for the affected aggregate processing plant as specified in 40 CFR 60.13 and 60.674.
 - b.
 - i. The water supply to the spray equipment shall be equipped with a metering device used to determine water usage for the control of particulate matter emissions.
 - ii. Inspections of water spray equipment and operation (such as leaking, maintaining adequate flow, clogging of flow lines,

etc.) shall be performed at least once per week when the affected aggregate processing plant is in operation.

7. Recordkeeping Requirements

The Permittee shall maintain records of the following items for the affected aggregate processing plant to demonstrate compliance with Conditions 2 through 6 of this permit:

- a. The Permittee shall retain all applicable records for the affected aggregate processing plant as specified by 40 CFR 60.7 and 60.676.
- b. The owner or operator of an emission unit subject to 35 IAC Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed [35 IAC 212.110(e)].
- c.
 - i. Pursuant to 35 IAC 212.316(g)(1), the owner or operator of any fugitive particulate matter emission unit subject to Condition 2(b)(iv) (see also 35 IAC 212.316) (i.e., located in McCook, Lake Calumet, or Granite City) shall keep written records of the application of control measures as may be needed for compliance with the opacity limitations of Condition 2(b)(iv) (see also 35 IAC 212.316).
 - ii. Pursuant to 35 IAC 212.316(g)(2), the records required under this Condition shall include at least the following:
 - A. The name and address of the source [35 IAC 212.316(g)(2)(A)];
 - B. The name and address of the owner and/or operator of the source [35 IAC 212.316(g)(2)(B)];
 - C. A map or diagram showing the location of all emission units controlled, including the location, identification, length, and width of roadways [35 IAC 212.316(g)(2)(C)];
 - D. For each application of water or chemical solution to roadways by truck: the name and location of the roadway controlled, application rate of each truck, frequency of each application, width of each application, identification of each truck used, total quantity of water or chemical used for each application and, for each application of chemical solution, the concentration and identity of the chemical [35 IAC 212.316(g)(2)(D)];
 - E. For application of physical or chemical control agents: the name of the agent, application rate and

frequency, and total quantity of agent and, if diluted, percent of concentration, used each day [35 IAC 212.316(g)(2)(E)]; and

- F. A log recording incidents when control measures were not used and a statement of explanation [35 IAC 212.316(g)(2)(F)].
- iii. The records required under this Condition (see also 35 IAC 212.316(g)) shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours [35 IAC 212.316(g)(4)].
- d. Recordkeeping of Maintenance and Repair. Pursuant to 35 IAC 212.324(g), sources subject to Condition 2(b)(vi) (see also 35 IAC 212.324) (i.e., sources located in McCook, Lake Calumet, or Granite City) shall maintain the following records:
 - i. Written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment shall be kept in accordance with Condition 3(b) (see also 35 IAC 212.324(f)) [35 IAC 212.324(g)(1)].
 - ii. The owner or operator shall document any period during which any process emission unit was in operation when the air pollution control equipment was not in operation or was malfunctioning so as to cause an emissions level in excess of the emissions limitation. These records shall include documentation of causes for pollution control equipment not operating or such malfunction and shall state what corrective actions were taken and what repairs were made [35 IAC 212.324(g)(2)].
 - iii. A written record of the inventory of all spare parts not readily available from local suppliers shall be kept and updated [35 IAC 212.324(g)(3)].
 - iv. Copies of all records required by Condition 7(d) (see also 35 IAC 212.324(g)) shall be submitted to the Illinois EPA within ten (10) working days after a written request by the Illinois EPA [35 IAC 212.324(g)(4)].
 - v. The records required under Condition 7(d) (see also 35 IAC 212.324(g)) shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours [35 IAC 212.324(g)(5)].
- e. Records addressing the application of control measures taken pursuant to the operating program required by Condition

2(b)(iii)(D) which are used to reduce fugitive particulate matter emissions.

- f. Records addressing use of good operating practices for the affected aggregate processing plant:
 - i. If the Permittee is relying on the requirements of Conditions 3(c)(iii) and 5(d) to demonstrate compliance with Condition 3(c), the Permittee shall maintain records of all moisture content tests performed including date, time, individual performing test, and location of sample (e.g., prior to crushing, stockpiles, etc.);
 - ii. If the Permittee is relying on Condition 3(c)(i) to demonstrate compliance with Condition 3(c), the Permittee shall maintain operating logs for the water spray equipment, including dates and times of usage, malfunctions (type, date, and measures taken to correct), water pressure, and dates when there was at least 0.25" of rainfall during the preceding 24 hours and the water spray equipment was not operated; and
 - iii. The Permittee shall maintain weekly records of water consumption in the spray equipment, as determined by the meter required by Condition 6(b)(i) and the amount of precipitation specified in Condition 7(f)(ii).
- g. Production and Operating Records:
 - i. Total aggregate throughput for the affected aggregate processing plant (tons/mo and tons/yr);
 - ii. Total aggregate throughput for the crushers (tons/mo and tons/yr);
 - iii. Total aggregate throughput for the screens (tons/mo and tons/yr); and
 - iv. Total aggregate throughput for the conveyors and transfer points (tons/mo and tons/yr).
- h. Annual PM and PM₁₀ emissions from the affected aggregate processing plant shall be maintained, based on aggregate production and the applicable emission factors, with supporting calculations.
- i. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years after the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed

on paper during normal source office hours so as to be able to respond to the Illinois EPA or USEPA request for records during the course of a source inspection.

8. Reporting Requirements

- a. The Permittee shall submit all applicable reports for the affected aggregate processing plant as specified in 40 CFR 60.7 and 60.676.
- b. A person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 IAC 212.110 that will be used [35 IAC 212.110(d)].
- c.
 - i. Pursuant to 35 IAC 212.316(g)(1), the owner or operator of any fugitive particulate matter emission unit subject to Condition 2(b)(iv) (see also 35 IAC 212.316) (i.e., source located in McCook, Lake Calumet, or Granite City) shall submit to the Illinois EPA an annual report containing a summary of the written records specified under Condition 7(c) (see also 35 IAC 212.316(g)).
 - ii. Copies of all records required by Condition 7(c) (see also 35 IAC 212.316(g)) shall be submitted to the Illinois EPA within ten (10) working days after a written request by the Illinois EPA and shall be transmitted to the Illinois EPA by a company-designated person with authority to release such records [35 IAC 212.316(g)(3)].
 - iii. A quarterly report shall be submitted to the Illinois EPA stating the following: the dates any necessary control measures were not implemented, a listing of those control measures, the reasons that the control measures were not implemented, and any corrective actions taken. This information includes, but is not limited to, those dates when controls were not applied based on a belief that application of such control measures would have been unreasonable given prevailing atmospheric conditions, which shall constitute a defense to the requirements of this Condition 2(b)(iv) (see also 35 IAC 212.316). This report shall be submitted to the Illinois EPA thirty (30) calendar days from the end of a quarter. Quarters end March 31, June 30, September 30, and December 31 [35 IAC 212.316(g)(5)].
- d. Pursuant to 35 IAC 212.324(g)(6), for sources subject to Condition 2(b)(vi), upon written request by the Illinois EPA, a report shall be submitted to the Illinois EPA for any period

specified in the request stating the following: the dates during which any process emission unit was in operation when the air pollution control equipment was not in operation or was not operating properly, documentation of causes for pollution control equipment not operating or not operating properly, and a statement of what corrective actions were taken and what repairs were made.

- e. The Permittee shall submit notification of the changes to the operation of the source to the Illinois EPA - Air Permit Section fourteen (14) calendar days prior to the commencement of such change as follows:
 - i. The replacement of any emission unit or air pollution control equipment authorized by Condition 1(d) of this permit; or
 - ii. The addition of any emission unit or air pollution control equipment so long as the source continues to comply with Condition 1(d) of this permit.
- f. The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected aggregate processing plant with the permit requirements as follows. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

Emissions of PM and/or PM₁₀ in excess of the limit specified in Condition 4 within 30 days of a record showing such an occurrence.

- g. Reporting Addresses

The following addresses should be utilized for the submittal of reports, notifications, and renewals:

- i. Illinois EPA - Air Compliance Section

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (MC 40)
P.O. Box 19276
Springfield, Illinois 62794-9276

- ii. Illinois EPA - Air Regional Field Office

FILL_CHOUSE ADDRESS_IN
Illinois Environmental Protection Agency
Division of Air Pollution Control - Region 1
9511 West Harrison
Des Plaines, Illinois 60016

Illinois Environmental Protection Agency
Division of Air Pollution Control - Region 2
5415 North University
Peoria, Illinois 61614

Illinois Environmental Protection Agency
Division of Air Pollution Control - Region 3
2009 Mall Street
Collinsville, Illinois 62234

iii. Illinois EPA - Air Permit Section

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506

iv. USEPA Region 5 - Air Branch

USEPA (AE - 17J)
Air & Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604

h. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

9. Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7 and the emission factors and formulas listed below:

a. To determine compliance with Condition 4(a)(iii), PM and PM₁₀ emissions from the affected aggregate processing plant shall be calculated based on the following emission factors:

<u>Item of Equipment</u>	<u>PM Emission Factor (lb/Ton)</u>	<u>PM₁₀ Emission Factor (lb/Ton)</u>
Crushers	0.0012	0.00054
Screens	0.0022	0.00074
Conveyors and Bins	0.00014	0.000046

These are the emission factors for crushed stone processing operations for tertiary crushing, screening (controlled), and conveyor transfer point (controlled) listed Table 11.19.2-2, AP-42, Volume I, Fifth Edition, Update 2004, August 2004.

Emissions (lb) = (wt. Of Aggregate Processed, ton) x (The
Appropriate Emission Factor, lb/ton)

10. The assembly of this plant at a new location will require a construction permit. This permit must be obtained prior to commencing construction at the new location. For this purpose, a new location is defined as a location in Illinois at which the plant does not have a valid operating permit or authorization letter.
11. The operation of this plant at a location in Illinois other than a location identified in a valid operating permit or an authorization letter requires another operating permit or authorization from the Illinois EPA. This operating permit/authorization must be obtained prior to operating at such location.
12. The Permitted shall notify the Illinois EPA in writing 5 days in advance of either disassembling or reassembling the plant at the source location identified in an authorization letter.

If you have any questions on this permit, please call a Permit Analyst at 217/782-2113.

Edwin C. Bakowski, P.E.
Manager, Permit Section
Division of Air Pollution Control

Date Signed: _____

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Attachment A - Emissions Summary

This attachment provides a summary of the maximum emission of an affected aggregate processing plant operating in compliance with the requirements of this permit. In preparing this summary, the Illinois EPA used the annual operating scenario, which results in maximum emissions from such a plant. This is production of 9,520,000 tons of aggregate per year. The resulting total maximum emissions of the affected aggregate processing plant are below 100 tons per year for the purposes of the Air Pollution Operating Permit Fee under Section 9.6(b)(1) of the Illinois Environmental Protection Act (Act). Actual emissions from an affected aggregate processing plant will be less than predicted in this summary to the extent that less materials will be handled by the plant and control measures are more effective than required by this permit.

<u>Item of Equipment</u>	Annual Emissions (Tons/Year)	
	<u>PM</u>	<u>PM₁₀</u>
17 Crushers	11.42	5.14
27 Screens	40.32	13.56
200 Conveyors and Bins	<u>28.25</u>	<u>9.28</u>
Total	<u>79.99</u>	<u>27.98</u>

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Attachment B

35 IAC 212.302 Geographical Areas of Application

1. Pursuant to 35 IAC 212.302(a), Condition 2(b)(iii) (see also 35 IAC 212.304 through 212.310 and 212.312) shall apply to all mining operations (SIC major groups 10 through 14), manufacturing operations (SIC major groups 20 through 39 except for those operations subject to 35 IAC Part 212 Subpart S (Grain-Handling and Grain-Drying Operations) that are outside the areas defined in Attachment C (see also 35 IAC 212.324(a)(1))), and electric generating operations (SIC group 491), which are located in the areas defined by the boundaries of the following townships, notwithstanding any political subdivisions contained therein, as the township boundaries were defined on October 1, 1979, in the following counties:

Cook:	All townships
Lake:	Shields, Waukegan, Warren
DuPage:	Addison, Winfield, York
Will:	DuPage, Plainfield, Lockport, Channahon, Peotone, Florence, Joliet
Peoria:	Richwoods, Limestone, Hollis, Peoria, City of Peoria
Tazewell:	Fondulac, Pekin, Cincinnati, Groveland, Washington
Macon:	Decatur, Hickory Point
Rock Island:	Blackhawk, Coal Valley, Hampton, Moline, South Moline, Rock Island, South Rock Island
LaSalle:	LaSalle, Utica
Madison:	Alton, Chouteau, Collinsville, Edwardsville, Fort Russell, Godfrey, Granite City, Nameoki, Venice, Wood River
St. Clair	Canteen, Caseyville, Centerville, St. Clair, Stites, Stookey, Sugar Loaf, Millstadt.

2. In the geographical areas defined in Attachment C (see also 35 IAC 212.324(a)(1)), Condition 2(b)(iii) (see also 35 IAC 212.304 through 212.310, and 212.312), and Condition 2(b)(iv) (see also 35 IAC 212.316) shall apply to all emission units identified in subsection (a) of 35 IAC 212.302, and shall further apply to the following operations: grain-handling and grain-drying (35 IAC Part 212 Subpart S), transportation, communications, electric, gas, and sanitary services (SIC major groups 40 through 49). Additionally, Condition 2(b)(iii) (see also 35 IAC 212.304 through 212.310 and 212.312) and Condition 2(b)(iv) (see also 35 IAC 212.316) shall apply to wholesale trade-farm supplies (SIC Industry No. 5191) located in the vicinity of Granite City, as defined in Attachment C (see also 35 IAC 212.324(a)(1)(C)) [35 IAC 212.302(b)].
3. Emission units must comply with subsection (b) of this 35 IAC 212.302 by May 11, 1993, or upon initial start-up, whichever occurs later [35 IAC 212.302(c)].

Attachment C

35 IAC 212.324 Process Emission Units in Certain Areas

1. Applicability.

- a. Pursuant to 35 IAC 212.324(a)(1), Condition 2(b)(vi) (see also 35 IAC 212.324) shall apply to any process emission unit located in any of the following areas:
 - i. That area bounded by lines from Universal Transmercator (UTM) coordinate 428000mE, 4631000mN, east to 435000mE, 4631000mN, south to 435000mE, 4623000mN, west to 428000mE, 4623000mN, north to 428000mE, 4631000mN, in the vicinity of McCook in Cook County, as shown in Illustration D of 35 IAC Part 212 [35 IAC 212.324(a)(1)(A)];
 - ii. That area bounded by lines from Universal Transmercator (UTM) coordinate 445000mE, 4622180mN, east to 456265mE, 4622180mN, south to 456265E, 4609020N, west to 445000mE, 4609020mN, north to 445000mE, 4622180mN, in the vicinity of Lake Calumet in Cook County, as shown in Illustration E of 35 IAC Part 212 [35 IAC 212.324(a)(1)(B)];
 - iii. That area bounded by lines from Universal Transmercator (UTM) coordinate 744000mE, 4290000mN, east to 753000mE, 4290000mN, south to 753000mE, 4283000mN, west to 744000mE, 4283000mN, north to 744000mE, 4290000mN, in the vicinity of Granite City in Madison County, as shown in Illustration F of 35 IAC Part 212 [35 IAC 212.324(a)(1)(C)].
- b. 35 IAC 212.324 shall not alter the applicability of Condition 2(b)(v) (see also 35 IAC 212.321 and 35 IAC 212.322 [35 IAC 212.324(a)(2)]).

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