



AIR QUALITY PROGRAM
836 Fulton Street
Pittsburgh, PA 15233-2124

General Operating Permit
Concrete Batch Plants

Issued To: ABC Company, Inc.

ACHD Permit #: 0000-OPxx

Facility: ABC Company, Inc.
123 Any Road
Any Town, PA ZIP

Date of Issuance: Month 00, 20XX

Expiration Date: Month 00, 20XX

Renewal Date: expiration date – 6mo.

Issued By: _____
JoAnn Truchan, P.E.
Program Manager, Engineering

Prepared By: _____
Engineer Name
Air Quality Engineer

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AMENDMENTS:

DATE	SECTION(S)
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I. CONTACT INFORMATION

Facility Location: ABC Company, Inc.
123 Any Road
Any Town, PA ZIP

Permittee/Owner: ABC Company, Inc.
123 Any Road
Any Town, PA ZIP

Permittee/Operator: XYZ, Inc. or type "same as above"
(if not Owner) 123 Somewhere Dr.
Any Town, State ZIP

Responsible Official:
Title:
Company:
Address:

Telephone Number:
E-mail Address:

Facility Contact:
Title:
Telephone Number:
E-mail Address:

AGENCY ADDRESSES:

ACHD Contact: Program Manager, Engineering
Allegheny County Health Department
Air Quality Program
836 Fulton Street
Pittsburgh, PA 15233-2124
aqpermits@alleghenycounty.us

II. CONCRETE BATCH DESCRIPTION

In a truck ready-mix plant, sand and aggregate are received via trucks and unloaded into storage piles, and cement and supplement (fly ash & slag) are unloaded from trucks into storage silos. Sand and aggregate are moved via a front-end loader to a hopper, which then transfers the material via open belt conveyors into an aggregate bin. All unmixed dry materials are placed into a truck mixer, water is added, and all mixing is done in the truck and shipped offsite.

In a central ready-mix plant, sand and aggregate are received via trucks and unloaded into storage piles, and cement and supplement (fly ash & slag) are unloaded from trucks into storage silos. Materials are transferred using hoppers and/or conveyors. A stationary mixer mixes the concrete which is then transferred into the transportation vehicle.

ABC Company is a truck/central ready-mix plant that consists of the following:

The emission units regulated by this permit are summarized in Table II-1:

TABLE II-1: Emission Unit Identification

[This is just an example. Please make the appropriate changes.]

I.D.	SOURCE DESCRIPTION	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL
P001	Concrete Batch Plant (two cement silos & truck loading and cement bather)	Fabric Filter	XX cubic yds/hr	Sand; Aggregate; Cement; Cement Supplement & Water
F001	Storage Piles (Aggregate & Sand)	Sweeping, Watering	--	Aggregate & Sand
F002	Paved and/or Unpaved Roadways	Sweeping, Watering	--	--

III. STATUTORY AUTHORITY AND GENERAL DESCRIPTION

In accordance with the Local Health Administration Law, P.L. 1304, 16 P.S. §§12001-12030 and ACHD Rules and Regulations Article XXI, §2102.03.j and §2103.22.k, Allegheny Health Department (Department) hereby issues this general operating permit for concrete batch plants.

IV. APPLICABILITY/SOURCE COVERAGE LIMITATIONS

Approval herein granted to operate under this General Permit is limited to units utilized for the purpose of loading, unloading, storing, and mixing materials for the purpose of mixing ready-made concrete as described in Section II above.

V. GENERAL CONDITIONS

1. **Application for Use** - Any person proposing to operate under this General Permit shall notify the Department using the operating permit application found in the Regulated Entities Portal (REP) and may not operate until receiving prior written approval from the Department, per §2102.03.j. of Article XXI.
2. **Prohibition of Air Pollution:** (§2101.11)
 - a. It shall be a violation of this permit to fail to comply with, or to cause or assist in the violation of, any requirement of this permit, or any order or permit issued pursuant to authority granted by Article XXI. The permittee shall not willfully, negligently, or through the failure to provide and operate necessary control equipment or to take necessary precautions, operate any source of air contaminants in such manner that emissions from such source:
 - 1) Exceed the amounts permitted by this permit or by any order or permit issued pursuant to Article XXI;
 - 2) Cause an exceedance of the ambient air quality standards established by Article XXI §2101.10; or
 - 3) May reasonably be anticipated to endanger the public health, safety, or welfare.
 - b. It shall be a violation of this permit to operate, or allow to be operated, any source in such manner as to allow the release of air contaminants into the open air or to cause air pollution as defined in Article XXI, except as is explicitly permitted by this permit or Article XXI.
3. **Applicability:**
 - a. This permit applies only to concrete batch plants and/or ready-mix plants.
 - b. This permit does not apply to:
 - 1) Sources that manufacture dry concrete or cement products (such as cinder block, concrete pipes, etc.), or
 - 2) Sources that use dry concrete or Portland cement in a manufacturing process.
 - c. The facility qualifies to apply for coverage under this general permit if all the following criteria are met:
 - 3) Construction of a new, true minor source concrete batch plant OR modification to an existing, true minor source concrete batch plant.

- 4) The new or modified true minor source concrete batch plant is located within Allegheny County.
 - 5) The potential to emit (PTE) is less than the New Source Review (NSR) major source thresholds.
 - 6) The controlled truck ready-mix plant is projected to process less than 250,000 cubic yards of concrete (500,000 tons) per rolling 12-month period, after the proposed construction or modification project is completed.
 - 7) The controlled central mix plant is projected to process less than 300,000 cubic yards of concrete (600,000 tons) per rolling 12-month period.
 - 8) The concrete batch plant shall have particulate emission controls in place that consist of a fabric filter or baghouse rated at a maximum of 0.01 gr/dscf for control of emissions from silos, weigh hoppers, and mixers.
4. **Compliance** (§2103.12.a.2.B; §2105.03) - Any facility operating under this General Permit must comply with the terms and conditions of the general permit. All plant equipment and any associated air cleaning devices shall be:
- a. Operated in such a manner as not to cause a violation of permit conditions or provisions of Article XXI;
 - b. Operated and maintained in a manner consistent with good operating and maintenance practices; and
 - c. Operated and maintained in accordance with the manufacturer's specifications and the applicable terms and conditions of this General Permit.
5. **Permit Modification, Suspension and Revocation** (§2103.14; §2103.15) - This General Permit may be modified, suspended or revoked if the Department determines that affected concrete batch plant equipment cannot be regulated under this general permit. General permit coverage may be revoked if the permittee fails to comply with applicable terms and conditions of the General Permit.
- The approval herein granted to operate the equipment shall be suspended, if, at any time, the permittee causes, or allows any modification (as defined in §2101.20 of Article XXI) of the equipment and any associated air pollution control device covered by this general permit, unless approved by the Department. Upon suspension of the general permit, the permittee may not continue to operate or use said equipment. If warranted, the Department will require that the equipment be permitted under the ACHD operating permit or Title V operating permit requirements, if applicable.
6. **Notice Requirements** (§2108.01.c) - As required by §2108.01.c., the permittee shall immediately notify the Department of any malfunction of the concrete batch plant equipment that results in, or may possibly result in, the emission of air contaminants in excess of the limitations specified in, or established pursuant to, any applicable rule or regulation contained in Article XXI. Written notice shall be submitted online through the ACHD Air Quality Regulated Entities Portal (REP). If REP is not available, written notice shall be sent to the Department at aqreports@alleghenycounty.us.
7. **General Permits at Title V Facilities** (§2103.22.k) - Any plant located at a "Title V facility" shall comply with the requirements of ACHD Article XXI §2103.22.k. (relating to general operating permits at Title V facilities).
8. **Permit Term** (§2103.12.e) - This General Permit will expire five (5) years after the date of issuance, pursuant to ACHD Article XXI §2103.12.e.

9. **Expiration and Renewal of Permit** (§2103.13.b) - The permittee's right to operate under this General Permit terminates on the date of expiration of this permit unless a timely and complete renewal application is submitted to the Department six (6) months prior to the permit expiration date. Upon receipt of a complete and timely application for renewal, the concrete batch plant may continue to operate subject to final action by the Department on the renewal application. This protection shall cease to exist if, subsequent to a completeness determination, the applicant fails to submit by the deadline any additional information required by the Department to process the renewal application.
10. **Permit and Maintenance Fees** (§2103.40) - The General Permit application and annual permit maintenance fees shall be submitted pursuant to §2103.40.a through j of ACHD Article XXI. The General Permit application for renewal shall include the identity of the owner or operator, location, current permit number, description of source category, the appropriate renewal fee established by Article XXI, and any other information requested by the Department. The renewal fee shall accompany the renewal application and shall be submitted to the Department at least six (6) months prior to the expiration of the General Permit.
11. **Applicable Laws** (§2104.08, §2105.02) - Nothing in this General Permit relieves the permittee from its obligation to comply with all applicable federal, state and local laws and regulations.
12. **Emissions Testing** (§2103.12.h.1) - The Department reserves the right to require emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Article XXI §2108.02. (§2103.12.h.1)
13. **Inspections** (§2109.01) - This concrete batch plant equipment shall be subject to inspections by the Department pursuant to ACHD Article XXI §2109.01.
14. **Odor Emissions** (§2104.04) - Emissions from concrete batch plant shall comply with ACHD Article XXI §2104.04. (regarding odor emissions).
15. **Standard Severability Requirement** (§2103.12.l) - The provisions of this permit are severable. If any provision of this permit is found by a court to be unconstitutional or otherwise void, the remaining provisions of this permit shall remain valid unless the court finds that such remaining provisions are so essentially and inseparably connected with, and so dependent upon, the void provision that it cannot be presumed that the Department would have issued such provisions without the void provision, or unless the court finds that such remaining provisions, standing alone, are incomplete and incapable of being executed in accordance with the Department's intent.
16. **Diesel Powered Motor Vehicle Idling** (§2105.92.b)
 - a. No driver shall cause or allow the engine of any heavy duty diesel powered motor vehicle subject to this section to idle prior to, during layover between, at the destination of, or at the conclusion of, any trip or route for more than five (5) consecutive minutes, except under the conditions described in Article XXI, §2105.92.b.
 - b. No driver shall cause or allow the engine of any heavy duty diesel powered motor vehicle subject to this section to be accelerated while idling, unless such action is taken in order to operate vehicle mounted accessory or service equipment.

17. **Materials Handling** (§2104.05) - The permittee shall not conduct, or allow to be conducted, any materials handling operation in such a manner that emissions from such operation are visible at or beyond the property line.

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VI. EMISSION UNIT LEVEL TERMS AND CONDITIONS

A. Concrete Batch Plants

1. Restrictions:

a. **Operational Restrictions:** (§2103.12.a.2.B; §2103.12.h.6)

- 1) The maximum hourly production rate for truck ready-mix facilities shall not exceed 200 cubic yards of concrete (400 tons) per hour.
- 2) The maximum annual production rate for truck ready-mix facilities shall not exceed 250,000 cubic yards of concrete (500,000 tons) per rolling 12-month period.
- 3) The maximum hourly production rate for central mix facilities shall not exceed 300 cubic yards of concrete (600 tons) per hour.
- 4) The maximum annual production rate for central mix facilities shall not exceed 300,000 cubic yards of concrete (600,000 tons) per rolling 12-month period.
- 5) At all times during the transfer of sand and aggregate, the drop height of the front-end bucket shall be minimized to the extent possible to minimize or eliminate visible emissions of fugitive dust.
- 6) Sand and aggregate loaded into the elevated bins shall, at all times, have an inherent moisture content sufficient to minimize or eliminate visible emissions of fugitive dust.

b. **Control of Particulate Matter:** (§2103.12.a.2.B; §2103.12.h.6; §2105.49)

- 1) Emissions from silos, weigh hoppers, and mixers shall be captured and directed to a baghouse or fabric filter at all times during operation.
- 2) The permittee shall not discharge or allow to be discharged gases from the baghouse stack(s) in excess of 0.01 gr/dscf.
- 3) Fugitive emissions from materials handling and loading shall be controlled with shrouds, suction, wetting, or best management (BMP) practices.
- 4) Fugitive emissions from storage piles and roadways shall be controlled with wetting, dust suppressants, or sweeping.
- 5) Cement and cement supplement shall be transferred pneumatically to the cement and cement supplement silos. The pneumatic system shall be adequately closed so as to eliminate at all times visible emissions of fugitive dust.
- 6) Each cement and cement supplement silo vent shall be adequately enclosed and vented to a fabric filter. The enclosure shall be sufficient so as to eliminate at all times visible emissions of fugitive dust at the point of capture.

c. **Visible Emissions:** (§2104.01.a)

Except as provided for by Article XXI §2108.01.d pertaining to a cold start, no person shall operate, or allow to be operated, any source in such manner that the opacity of visible emissions from a flue or process fugitive emissions from such source, excluding uncombined water:

- 1) Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or
- 2) Equal or exceed an opacity of 60% at any time.

2. Monitoring Requirements: (§2103.12.i)

- a. The permittee shall inspect the concrete batch plant operation, including the fabric filters and/or baghouses, on a weekly basis to ensure compliance with the operating requirements of Section VI.A.1 above. Any deviations from the requirements and any holes and openings in the system shall be corrected as soon as possible, and operations shall not continue unless all restrictions in Section VI.A.1 above are being met.
- b. Baghouse bags or filter elements shall be replaced, and repairs shall be made, as necessary and in accordance with manufacturers' specifications.
- c. The permittee shall perform weekly checks for any visible fugitive particulate emissions from each sand and/or aggregate transfer point and truck loading serving this emissions unit. Weekly checks shall be conducted when the emissions unit is in operation and when the weather conditions allow. No inspections for any visible particulate emissions from the fabric filters are required on days the material handling operations are not in operation. The presence or absence of any visible particulate emissions shall be recorded electronically or in an operations log.
- d. The permittee shall perform weekly checks for any visible fugitive particulate emissions from each sand and/or aggregate transfer point and truck loading serving this emissions unit. Weekly checks shall be conducted when the emissions unit is in operation and when the weather conditions allow. No inspections for any visible fugitive particulate emissions from each sand and/or aggregate transfer point and truck loading are required on days the material handling operations are not in operation. The presence or absence of any visible emissions shall be noted electronically or in an operations log.

3. Record Keeping Requirements: (§2103.12.j)

- a. The permittee shall maintain monthly and 12-month rolling records of material throughput and the hours of operation for the concrete batch plant.
- b. The permittee shall maintain a maintenance log for each baghouse or fabric filter. The records shall contain at a minimum:
 - 1) The date and result of inspections required by Section 0 above.
 - 2) The date of the last bag, filter, or cartridge replacement.
 - 3) Any mechanical repairs or adjustments made.
 - 4) If visible particulate emissions are observed, the following must be recorded:
 - a) the total duration of any visible emission incident;
 - b) any corrective actions taken to eliminate the visible emissions;
 - c) whether the emissions are representative of normal operations;
 - d) if the emissions are not representative of normal operations, the cause of the visible emissions;
 - e) the total duration of any visible emission incident; and
 - f) any corrective actions taken to eliminate the visible emissions.
- c. All records required under this section shall be maintained by the permittee for a period of five (5) years following the date of such record.

4. Reporting Requirements: (§2103.12.h, §2103.12.k)

- a. The permittee shall submit semi-annual reports to the Department. Any deviations from permit requirements must be clearly identified and reported to the Department.
 - 1) One semiannual report is due by July 31 of each year for the time period beginning January 1 and ending June 30.
 - 2) One semiannual report is due by February 1 of each year for the time period beginning July 1 and ending December 31.
- b. The semiannual reports shall contain the following:
 - 1) Monthly and 12-month rolling records of material throughput and the hours of operation for the concrete batch plant.
 - 2) Records of maintenance performed as a result of inspections required by Section 0 above.
 - 3) All records of non-compliance and corrective actions taken to eliminate visible particulate emissions.
- c. The permittee shall submit on an annual basis, a certification of compliance form with all terms and conditions contained in this permit, including emission limitations, standards, or work practices, and shall include the following information at a minimum:
 - 1) The identification of each term or condition of the permit that is the basis of the certification;
 - 2) The compliance status;
 - 3) Whether any noncompliance was continuous or intermittent;
 - 4) The method(s) used for determining the compliance status of the source, currently and over the reporting period, consistent with the provisions of this permit; and
 - 5) Such other facts as the Department may require to determine the compliance status of the source.
- d. All inspections, logs, and records shall be provided to the Department upon request.
- e. Annual certification of compliance forms, as provided in REP (unless provided differently by ACHD), must be submitted to the Department by March 1 of each year for the time period beginning January 1 of the previous year and ending December 31 of the same year.
- f. Annual certifications and semiannual reports shall be submitted online through REP. If REP is not available, written notice shall be sent to the Department at aqreports@alleghenycounty.us.

5. Work Practice Standard: (§2103.12.a.2.B; §2103.12.h.6)

- a. The permittee shall maintain onsite, for emergency replacement, 25% of the total number of bags or filter elements used by the baghouse or fabric filter.
- b. The baghouse or fabric filter shall be properly operated and maintained according to good engineering practices and in accordance with manufacturer's specifications at all times.
- c. Material removed from the baghouse or fabric filter shall be disposed of in a manner preventing emissions into the atmosphere.