AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act as amended, (33 U.S.C. §§1251 et seq.; the "CWA", and the Massachusetts Clean Waters Act, as amended, (M.G.L. Chap. 21, §§26-53),

Aggregate Industries – Northeast Region, Inc.
1715 Broadway
Saugus, MA 01906

is authorized to discharge from a facility located at

Aggregate Industries, Inc.
30 Danvers Road
Swampscott, MA 01907

to receiving water named

Foster Pond (Outfall 001) & a wetlands system which includes Thompson's Meadow and is adjacent to Forest River (Outfall 002)

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This Permit shall become effective on the first day of the calendar month following 60 days after signature.

This Permit and the authorization to discharge expire at midnight, five (5) years from the last day of the month preceding the effective date.

This Permit supersedes the Permit issued on April 14, 2000.

This Permit consists of 12 pages in Part I including effluent limitations, monitoring requirements, 7 pages in Attachment 1 – Freshwater Chronic Toxicity Test Procedure and Protocol, and 25 pages in Part II including General Conditions and Definitions.

Signed this 1st day of May. 2008

/S/ SIGNATURE ON FILE

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Stephen S. Perkins, Director
Office of Ecosystem Protection
Environmental Protection Agency
Boston, MA

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Glenn Haas, Director
Division of Watershed Management
Department of Environmental Protection
Commonwealth of Massachusetts
Boston, MA

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge treated process water (sand and gravel wash water, quarry dewatering, dust control water, steam cleaning water, equipment wash water, and wheel wash water), ground water seepage from quarry dewatering, storm water from the site, and treated storm water and wash water from the maintenance garage area through **Outfall Serial Number 001** to Foster Pond. Such discharge shall: 1) be limited and monitored by the permittee as specified below; and 2) not cause a violation of the State Surface Water Quality Standards of the receiving water.

Effluent Characteristic	Units	Discharge Limitation		Monitoring Requirements [1]	
		Average Monthly	Maximum Daily	Measurement Frequency [2]	Sample Type
Flow	MGD	Report	Report	Continuous	Recorder
Total Suspended Solids (TSS)	mg/L	25	45	1/Month	Composite [3]
pH	S.U.	----	6.5 to 8.3	1/Week	Grab
Ammonia, Total	mg/L	Report	----	1/Month	Composite [3]
Turbidity	NTU	8	25	1/Week	Grab
Oil and Grease (O&G)	mg/L	----	15	1/Month	Grab
Total BTEX [7]	µg/L	----	Report	1/Month	Grab
Benzene	µg/L	Report	Report	1/Month	Grab
Toluene	µg/L	Report	Report	1/Month	Grab
Ethylbenzene	µg/L	Report	Report	1/Month	Grab
Xylene	µg/L	Report	Report	1/Month	Grab

Nitrate Compounds	mg/L	Report	Report	1/Month	Grab
Whole Effluent Toxicity (WET)					
Acute LC_{50} [4,5]	%	Report		Annually [2]	Composite [3]
Chronic C-NOEC [4,5]	%	Report		Annually [2]	Composite [3]
Hardness [6]	mg/L	Report		Annually [2]	Composite [3]
Alkalinity [6]	mg/L	Report		Annually [2]	Composite [3]
pH [6]	SU	Report		Annually [2]	Composite [3]
Specific Conductance [6]	µmhos/cm	Report		Annually [2]	Composite [3]
Total Solids [6]	mg/L	Report		Annually [2]	Composite [3]
Ammonia [6]	mg/L	Report		Annually [2]	Composite [3]
Total Organic Carbon [6]	mg/L	Report		Annually [2]	Composite [3]
Total Residual Chlorine [6]	mg/L	Report		Annually [2]	Composite [3]
Dissolved Oxygen [6]	mg/L	Report		Annually [2]	Composite [3]
Total Cadmium [6]	mg/L	Report		Annually [2]	Composite [3]
Total Chromium [6]	mg/L	Report		Annually [2]	Composite [3]
Total Lead [6]	mg/L	Report		Annually [2]	Composite [3]
Total Copper [6]	mg/L	Report		Annually [2]	Composite [3]
Total Zinc [6]	mg/L	Report		Annually [2]	Composite [3]
Total Nickel [6]	mg/L	Report		Annually [2]	Composite [3]
Total Aluminum [6]	mg/L	Report		Annually [2]	Composite [3]
Total Magnesium [6]	mg/L	Report		Annually [2]	Composite [3]
Total Calcium [6]	mg/L	Report		Annually [2]	Composite [3]

See page 4 for explanation of footnotes.

Footnotes:

1. Samples taken in compliance with the monitoring requirements specified above shall be taken at a point representative of all the discharge from the site through the outfall, prior to mixing with the receiving waters. Within sixty (60) days of the effective date of this permit, the permittee shall develop an appropriate outfall design to collect representative samples of the discharge from the holding pond to Foster Pond and initiate local/state permitting of the new outfall design. Within six (6) months of the effective date of this permit, the permittee shall implement the appropriate outfall design to collect representative samples of the discharge from the holding pond to Foster Pond. **The permittee shall submit the final design plans to EPA within sixty (60) days of the effective date of this permit.**

2. Sampling frequency of 1/week is defined as the sampling of one (1) discharge event in each calendar week, when discharge occurs. Sampling frequency of 1/month is defined as the sampling of one (1) discharge event in each calendar month, when discharge occurs. Sampling frequency of annually is defined as the sampling of one (1) discharge event in each calendar year, when discharge occurs. The permittee shall submit the results to EPA of any additional testing done to that required herein, if it is conducted in accordance with EPA approved methods consistent with the provisions of 40 CFR §122.41(l)(4)(ii).

3. A composite sample is a sample consisting of grab samples collected at hourly intervals (two minimum) during a normal discharge.

4. The permittee shall conduct annual chronic (and modified acute) toxicity tests. The chronic test may be used to calculate the acute LC_{50} at the 48 hour exposure interval. The permittee shall test the daphnid, Ceriodaphnia dubia, and fathead minnow, Pimephales promelas. The test results shall be submitted by the last day of the full month following completion of the test. The tests must be performed in accordance with test procedures and protocols specified in Attachment 1 of this permit. The permittee shall submit monthly DMRs, and during months when no tests are performed, enter "NODI 9" for that month.

5. If toxicity test(s) using receiving water as diluent show the receiving water to be toxic or unreliable, the permittee shall follow procedures outlines in Section IV (Dilution Water) of Attachment 1 in order to obtain permission to use an alternate dilution water. In lieu of individual approvals for alternate dilution water required in Attachment 1, EPA-New England has developed a Self-Implementing Alternative Dilution Water Guidance document (called "Guidance Document") which may be used to obtain automatic approval of an alternate dilution water, including the appropriate species for use with that water. If this Guidance Document is revoked, the permittee shall revert to obtaining approval as outlined in Attachment 1. The "Guidance Document" has been sent to all permittees with their annual set of DMRs and Revised Updated Instructions for Completing EPA's Pre-Printed NPDES Discharge Monitoring Report (DMR) Form 3320-1 and is not intended as a direct attachment to this permit. Any modification or revocation to this "Guidance Document" will be transmitted to the permittees as part of the annual DMR instruction package. However, at any time, the permittee may choose to contact EPA-New England directly using the approach outlined in Attachment 1.

6. For each Whole Effluent Toxicity (WET) test the permittee shall report on the appropriate Discharge Monitoring Report (DMR), the concentrations of the Hardness, Total Ammonia Nitrogen as Nitrogen, Alkalinity, pH, Specific Conductance, Total Solids, Total Organic Carbon, Total Residual Chlorine, Dissolved Oxygen, Total Recoverable Aluminum, Cadmium, Chromium, Copper, Lead, Nickel, Zinc, Magnesium, and Calcium found in the 100 percent effluent sample. The permittee should note that all chemical parameter results must still be reported in the appropriate toxicity report.

7. Benzene, Ethylbenzene, Toluene, Xylene Combination

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (cont'd)

2. During the period beginning on the effective date and lasting through the expiration date, the permittee is authorized to discharge storm water runoff (from the RMC plant area, the granules plant area, and a fueling area) and dust control runoff through **Outfall Serial Number 002** to a wetlands system including Thompson's Meadow, adjacent to Forest River. Such discharge shall: 1) be limited and monitored by the permittee as specified below; and 2) not cause a violation of the State Surface Water Quality Standards of the receiving water.

Effluent Characteristic	Units	Discharge Limitation		Monitoring Requirements [1]	
		Average Monthly	Maximum Daily	Measurement Frequency [2]	Sample Type
Flow	MGD	Report	Report	Continuous	Recorder
Total Suspended Solids (TSS)	mg/L	25	45	1/Month	Composite [3]
pH	S.U.	----	6.5 to 8.3	1/Month	Grab
Turbidity	NTU	Report	Report	1/Month	Grab
Oil and Grease (O&G)	mg/L	----	15	1/Month	Grab
Total BTEX [4]	µg/L	----	Report	1/Month	Grab
Benzene	µg/L	Report	Report	1/Month	Grab
Toluene	µg/L	Report	Report	1/Month	Grab
Ethylbenzene	µg/L	Report	Report	1/Month	Grab
Xylene	µg/L	Report	Report	1/Month	Grab

See page 6 for explanation of footnotes.

Footnotes:

1. Samples take in compliance with the monitoring requirements specified above shall be taken at a point representative of all the discharge from the site through the outfall, prior to mixing with the receiving waters. Within ninety (90) days of the effective date of this permit, the permittee shall install a flow metering device and reconstruct the monitoring location in order to collect representative samples of all the discharge through Outfall 002. Prior to installation of the flow metering device, the permittee shall continue to estimate the flow as it has done in the past (by extrapolation of rainfall data and surface area drainage).

2. Samples shall be taken during wet weather conditions, if practicable, at each outfall at representative locations of the points of discharge. Wet weather conditions mean during a storm event greater than 0.1 inches in magnitude that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rain fall) storm event. The 72-hour interval is waived when the preceding measurable storm did not yield a measurable discharge, or if the permittee is able to document that less than a 72-hour interval is representative of local storm events during the sampling period. The grab sample shall be taken during the first 30 minutes of discharge. If it is not practicable to take the sample during the first 30 minutes, sample as soon as practicable and describe why a grab sample during the first 30 minutes was impracticable. Submit this information on or with the DMR.

3. Sampling frequency of 1/month is defined respectively as the sampling of <u>one</u> (1) discharge event in each calendar month, when discharge occurs. Sampling frequency of annually is defined as the sampling of <u>one</u> (1) discharge event in each calendar year, when discharge occurs. The permittee shall submit the results to EPA of any additional testing done to that required herein, if it is conducted in accordance with EPA approved methods consistent with the provisions of 40 CFR §122.41(l)(4)(ii).

4. A composite sample is a sample consisting of grab samples collected at hourly intervals (two minimum) during a normal discharge.

5. Benzene, Ethylbenzene, Toluene, Xylene Combination

Part I.A. (Continued)

3. The pH of the effluent shall not be less than 6.5 or greater than 8.3 at any time unless these values are exceeded as a result of natural causes.

4. The permittee is authorized to discharge water from rock quarry and ready mix concrete plant operations. The permittee shall not discharge into the receiving water a final effluent to which it has added any toxic pollutants.
   a. Pollutants which are not limited by this permit, but which have been specifically disclosed in the application, may be discharged provided that such discharge does not violate Section 307 and 311 of the Clean Water Act or applicable water quality standards.
   b. The effluent shall not result in any demonstrable harm to the aquatic life or violate any water quality standard which has been or may be promulgated.
   c. The discharge shall not cause objectionable color, odor, or turbidity to the receiving waters.
   d. The discharge shall not contain a visible oil sheen, foam, or floating solids at any time.

5. The discharge shall not contain materials in concentrations or combinations which are hazardous or toxic to human health, aquatic life of the receiving surface waters or which would impair the uses designated by its classification.

6. The discharge of water which collects in the above ground storage tank (AST) containment areas is prohibited.

7. The discharge of water from the granules plant is prohibited.

8. The use of blasting agents containing perchlorate is prohibited.

9. The discharge shall not impart color, taste, turbidity, toxicity, radioactivity or other properties which cause those waters to be unsuitable for the designated uses and characteristics ascribed to their use.

10. Notwithstanding specific conditions of this Permit, the effluent must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.

11. Chemicals (e.g. disinfecting agents, detergents, emulsifiers) or bioremedial agents, including microbes, shall not be added to the collection and treatment systems (or used in washing) without prior approval by the U. S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) to prevent hydrocarbon and/or particulate matter carryover into the receiving water.

12. EPA may modify this Permit in accordance with EPA regulations in 40 Code of Federal Regulations (CFR) §122.62 and §122.63 to incorporate more stringent effluent limitations,

increase the frequency of analyses, or impose additional sampling and analytical requirements.

13. All existing manufacturing, commercial, mining and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:

    a. That any activity has occurred or will occur which would result in the discharge, on a routine basis, of any toxic pollutant which is not limited in the Permit, if that discharge will exceed the highest of the following "notification levels":

        (1) One hundred micrograms per liter (100 µg/l);

        (2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrite; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

        (3) Five (5) times the maximum concentration value reported for that pollutant in the Permit application in accordance with 40 C.F.R.§122.21(g)(7); or

        (4) Any other notification level established by the Director in accordance with 40 C.F.R.§122.44(f).

    b. That any activity has occurred or will occur which would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant which is not limited in the Permit, if that discharge will exceed the highest of the following "notification levels":

        (1) Five hundred micrograms per liter (500 µg/l);

        (2) One milligram per liter (1 mg/l) for antimony;

        (3) Ten (10) times the maximum concentration value reported for that pollutant in the Permit application in accordance with 40 C.F.R.§122.21(g)(7).

        (4) Any other notification level established by the Director in accordance with 40 C.F.R.§122.44(f).

    c. That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the Permit application.

14. Toxics Control

    a. The permittee shall not discharge any pollutant or combination of pollutants in toxic amounts.

b. Any toxic components of the effluent shall not result in any demonstrable harm to aquatic life or violate any state or federal water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this Permit may be revised or amended in accordance with such standards.

B. STORM WATER POLLUTION PREVENTION PLAN

1. The permittee shall develop, implement, and maintain a Storm Water Pollution Prevention Plan (SWPPP) designed to reduce, or prevent, the discharge of pollutants in storm water to the receiving waters identified in this permit. The SWPPP shall be a written document and consistent with the terms of this permit. The permittee shall comply with the terms of its SWPPP.

2. The SWPPP shall be completed or updated and signed by the permittee within 90 days after the effective date of this Permit. The permittee shall certify that the SWPPP has been completed or updated and that it meets the requirements of the permit. The certification shall be signed in accordance with the requirements identified in 40 CFR §122.22. **A copy of this initial certification shall be sent to EPA and MassDEP within one hundred and twenty (120) days of the effective date of the Permit.**

3. The SWPPP shall be consistent with the general provisions for SWPPPs included in the most current version of the Multi-Sector General Permits for Storm Water Discharges Associated with Industrial Activities. (The current MSGP was issued October 30, 2000 – see 65 FR 64812-64815.) The SWPPP shall include best management practices (BMPs) for on-site activities that will minimize the discharge of pollutants in storm water to waters of the United States.

4. The SWPPP shall be prepared in accordance with good engineering practices, identify potential sources of pollution that may reasonably be expected to affect the quality of the storm water discharges, and describe and ensure implementation of practices which will be used to reduce the pollutants and assure compliance with this permit. Specifically, the SWPPP shall contain the elements listed below:

   a. A pollution prevention team responsible for developing, implementing, maintaining, revising and ensuring compliance with the SWPPP.
   b. A site description which includes a list of activities at the facility; a site map showing drainage areas and direction of storm water flows; receiving waters and outfall location; the location of industrial activities, storage, disposal, material handling; and all structural controls.
   c. A summary of all pollutant sources which includes all areas where spills have occurred or could occur. For each source, identify the expected drainage and the corresponding pollutant.
   d. A summary of any existing storm water discharge sampling data.
   e. A description of all storm water controls, both structural and non-structural. BMPs must include good housekeeping measures, preventative maintenance programs, spill

prevention and response procedures, runoff management practices, and proper handling of salt or materials containing salt that are used for deicing activities. The SWPPP shall describe how the BMPs are appropriate for the facility. All BMPs shall be properly maintained and be in effective operating conditions.

5. All areas identified in the SWPPP shall be inspected, at least on a quarterly basis. Inspections shall occur beginning the 1st quarter after the effective date of the permit. EPA considers quarters as follows: January to March; April to June; July to September; and October to December.

6. The permittee shall amend and update the SWPPP within 14 days for any changes at the facility affecting the SWPPP. Changes which may affect the SWPPP include, but are not limited to, the following activities: a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to the waters of the United States; a release of a reportable quantity of pollutants as described in 40 CFR §302; or a determination by the permittee or EPA that the SWPPP appears to be ineffective in achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity. Any amended or new versions of the SWPPP shall be re-certified by the permittee. Such re-certifications also shall be signed in accordance with the requirements identified in 40 CFR §122.22

7. The permittee shall certify at least annually that the previous year's inspections and maintenance activities were conducted, results were recorded, records were maintained, and that the facility is in compliance with the SWPPP. If the facility is not in compliance with any aspect of the SWPPP, the annual certification shall state the non-compliance and the remedies which are being undertaken. Such annual certifications also shall be signed in accordance with the requirements identified in 40 CFR §122.22. The permittee shall keep a copy of the current SWPPP and all SWPPP certifications (the initial certification, re-certifications, and annual certifications) signed during the effective period of this permit at the facility and shall make it available for inspection by EPA and MassDEP.

8. The permittee shall develop and implement site specific BMPs; including BMPs to achieve the following:
   a. To ensure proper inspection and cleaning of the oil/water separator. The oil/water separator shall be inspected at least quarterly and cleaned at least annually.
   b. To require storage of materials and equipment such that contact with storm water is limited, and avoided whenever possible.
   c. To ensure all site storm water not discharged through Outfalls 001 or 002 remains onsite.
   d. To require proper cleanup of any residuals from previous manufacturing processes.
   e. To reduce the amount of turbidity in the effluent.

C. REOPENER CLAUSES

1. This Permit shall be modified, or alternately, revoked and reissued, to comply with any applicable standard or limitation promulgated or approved under sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:

   a. Contains different conditions or is otherwise more stringent than any effluent limitation in the Permit; or

   b. Controls any pollutants not limited in the Permit.

D. MONITORING AND REPORTING

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate Discharge Monitoring Report Form(s) postmarked no later than the 15th day of the month following the effective date of the Permit. Signed and dated originals of these, and all other reports required herein, shall be submitted to EPA at the following address:

Environmental Protection Agency, Region 1
Water Technical Unit (SEW)
P.O. Box 8127
Boston, Massachusetts 02114

Signed and dated Discharge Monitoring Report Form(s) and all other reports required by this Permit shall also be submitted to the State at the following addresses:

Massachusetts Department of Environmental Protection
Northeast Regional Office
Bureau of Waste Prevention
205B Lowell Street
Wilmington, Massachusetts 01887

and

Massachusetts Department of Environmental Protection
Division of Watershed Management
Surface Water Discharge Permit Program
627 Main Street, 2nd Floor
Worcester, Massachusetts 01608

E. STATE PERMIT CONDITIONS

1. This discharge Permit is issued jointly by the EPA and the MassDEP under Federal and State law, respectively. As such, all the terms and conditions of this Permit are hereby incorporated into and constitute a discharge Permit issued by the Commissioner of the MassDEP pursuant to M.G.L. Chap. 21, §43 and 314 C.M.R. 3.00. All of the requirements contained in this authorization, as well as the standard conditions contained in 314 CMR 3.19, are hereby incorporated by reference into this state surface water discharge permit.

2. Each Agency shall have the independent right to enforce the terms and conditions of this Permit. Any modification, suspension or revocation of this Permit shall be effective only with respect to the Agency taking such action, and shall not affect the validity or status of this Permit as issued by the other Agency, unless and until each Agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this Permit is declared, invalid, illegal or otherwise issued in violation of State law such Permit shall remain in full force and effect under Federal law as a NPDES Permit issued by the U.S. Environmental Protection Agency. In the event this Permit is declared invalid, illegal or otherwise issued in violation of Federal law, this Permit shall remain in full force and effect under State law as a Permit issued by the Commonwealth of Massachusetts.