STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NPDES AND STATE PERMIT

issued to

Tilcon Connecticut, Inc.
Black Rock Avenue
P.O. Box 1357
New Britain, CT 06050-1357

Location Address:

Tilcon Connecticut, Inc.
190 Totoket Road
Pine Orchard Dock
Branford, CT 06405

Facility ID: 014-037

Permit ID: CT0000906 and GW0000001

Receiving Stream: Long Marsh Creek

Permit Expires: May 2, 2015

Watershed: South Central Shoreline **Basin Code**: 5000

SECTION 1: GENERAL PROVISIONS

(A) This permit is reissued in accordance with section 22a-430 of Chapter 446k, Connecticut General Statutes ("CGS"), and Regulations of Connecticut State Agencies ("RCSA") adopted thereunder, as amended, and section 402(b) of the Clean Water Act, as amended, 33 USC 1251, et. seq., and pursuant to an approval dated September 26, 1973, by the Administrator of the United States Environmental Protection Agency for the State of Connecticut to administer an N.P.D.E.S. permit program.

(B) Tilcon Connecticut, Inc., ("Permittee"), shall comply with all conditions of this permit including the following sections of the RCSA which have been adopted pursuant to section 22a-430 of the CGS and are hereby incorporated into this permit. Your attention is especially drawn to the notification requirements of subsection (i)(2), (i)(3), (j)(1), (j)(6), (j)(8), (j)(9)(C), (j)(10)(C), (j)(11)(C), (D), (E), and (F), (k)(3) and (4) and (l)(2) of section 22a-430-3.

Section 22a-430-3 General Conditions

(a)Definitions
(b)General
(c)Inspection and Entry
(d)Effect of a Permit
(e)Duty
(f)Proper Operation and Maintenance
(g)Sludge Disposal
(h)Duty to Mitigate
(i)Facility Modifications; Notification
(j)Monitoring, Records and Reporting Requirements
(k)Bypass
(l)Conditions Applicable to POTWs
(m)Effluent Limitation Violations (Upsets)
(n)Enforcement
(o)Resource Conservation
(p)Spill Prevention and Control
(q)Instrumentation, Alarms, Flow Recorders
(r)Equalization

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Section 22a-430-4 Procedures and Criteria

(a) Duty to Apply
(b) Duty to Reapply
(c) Application Requirements
(d) Preliminary Review
(e) Tentative Determination
(f) Draft Permits, Fact Sheets
(g) Public Notice, Notice of Hearing
(h) Public Comments
(i) Final Determination
(j) Public Hearings
(k) Submission of Plans and Specifications. Approval.
(l) Establishing Effluent Limitations and Conditions
(m) Case by Case Determinations
(n) Permit issuance or renewal
(o) Permit Transfer
(p) Permit revocation, denial or modification
(q) Variances
(r) Secondary Treatment Requirements
(s) Treatment Requirements for Metals and Cyanide
(t) Discharges to POTWs - Prohibitions

(C) Violations of any of the terms, conditions, or limitations contained in this permit may subject the Permittee to enforcement action including, but not limited to, seeking penalties, injunctions and/or forfeitures pursuant to applicable sections of the CGS and RCSA.

(D) Any false statement in any information submitted pursuant to this permit may be punishable as a criminal offense under section 22a-438 or 22a-131a of the CGS or in accordance with section 22a-6, under section 53a-157b of the CGS.

(E) The authorization to discharge under this permit may not be transferred without prior written approval of the Commissioner of Environmental Protection ("Commissioner"). To request such approval, the Permittee and proposed transferee shall register such proposed transfer with the Commissioner, at least 30 days prior to the transferee becoming legally responsible for creating or maintaining any discharge which is the subject of the permit transfer. Failure, by the transferee, to obtain the Commissioner's approval prior to commencing such discharge(s) may subject the transferee to enforcement action for discharging without a permit pursuant to applicable sections of the CGS and RCSA.

(F) No provision of this permit and no action or inaction by the Commissioner shall be construed to constitute an assurance by the Commissioner that the actions taken by the Permittee pursuant to this permit will result in compliance or prevent or abate pollution.

(G) Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.

(H) An annual fee shall be paid for each year this permit is in effect as set forth in section 22a-430-7 of the Regulations of Connecticut State Agencies.

(I) This permitted discharge is consistent with the applicable goals and policies of the Connecticut Coastal Management Act (section 22a-92 of the Connecticut General Statutes).

SECTION 2: DEFINITIONS

(A) The definitions of the terms used in this permit shall be the same as the definitions contained in section 22a-423 of the CGS and section 22a-430-3(a) and 22a-430-6 of the RCSA, except for "No Observable Acute Effect Level (NOAEL)" which is redefined below.

(B) In addition to the above, the following definitions shall apply to this permit:

"----" in the limits column on the monitoring table means a limit is not specified but a value must be reported on the DMR.

"Average Monthly Limit" means the maximum allowable "Average Monthly Concentration" as defined in section 22a-430-3(a) of the RCSA when expressed as a concentration (e.g. mg/l); otherwise, it means "Average Monthly Discharge Limitation" as defined in section 22a-430-3(a) of the RCSA.

"Critical Test Concentration (CTC)" means the specified effluent dilution at which the permittee is to conduct a single-concentration Aquatic Toxicity test.

"Daily Concentration" means the concentration of a substance as measured in a daily composite sample or, the arithmetic average of all grab sample results defining a grab sample average.

"Daily Quantity means the quantity of waste discharged during an operating day.

"gpm" means gallon per minute.

"Instantaneous Limit" means the highest allowable concentration of a substance as measured by a grab sample, or the highest allowable measurement of a parameter as obtained through instantaneous monitoring.

"Maximum Daily Limit" means the maximum allowable "Daily Concentration" (defined above) when expressed as a concentration (e.g. mg/l); otherwise, it means the maximum allowable "Daily Quantity" as defined above, unless it is expressed as a flow quantity. If expressed as a flow quantity it means Maximum Daily Flow, as defined in section 22a-430-3(a) of the RCSA.

"mg/l" means milligram per liter.

"NA" as a Monitoring Table abbreviation means not applicable.

"No Observable Acute Effect Level (NOAEL)" means any concentration equal to or less than the critical test concentration in a single concentration (pass/fail) toxicity test conducted pursuant to section 22a-430-3(j)(7)(A)(i) RCSA demonstrating 90% or greater survival of test organisms at the CTC.

"NR" as a Monitoring Table abbreviation means not required.

"ppt" means parts per thousand.

"Quarterly" in the context of a sampling frequency, means sampling is required at a minimum of once per quarter and shall be reported in the months of March, June, September and December.

"Range During Month" ("RDM"), as a sample type, means the lowest and the highest values of all

of the monitoring data for the reporting month.

"Range During Sampling" ("RDS"), as a sample type, means the maximum and minimum of all values recorded as a result of analyzing each grab sample of; 1) a Composite Sample, or, 2) a Grab Sample Average. For those Permittees with continuous monitoring and recording pH meters, Range During Sampling means the maximum and minimum readings recorded with the continuous monitoring device during the Composite or Grab Sample Average sample collection.

"ug/l" means micrograms per liter.

SECTION 3: COMMISSIONER'S DECISION

(A) The Commissioner has issued a final determination and found that continuance of the existing system to treat the discharge will protect the waters of the state from pollution. The Commissioner's decision is based on **Application No. 200602980** for surface water permit reissuance received on December 1, 2006 and on **Application No. 200603096** for groundwater permit reissuance received on December 22, 2006, and the administrative record, established in the processing of the applications.

(B) The Commissioner hereby authorizes the Permittee to discharge in accordance with the provisions of this permit, the above referenced application, and all approvals issued by the Commissioner or the Commissioner's authorized agent for the discharges and/or activities authorized by, or associated with, this permit.

(C) The Commissioner reserves the right to make appropriate revisions to the permit in order to establish any appropriate effluent limitations, schedules of compliance, or other provisions, which may be authorized under the Federal Clean Water Act or the CGS or regulations, adopted thereunder, as amended. The permit as modified or renewed under this paragraph may also contain any other requirements of the Federal Clean Water Act or CGS or regulations adopted thereunder which are then applicable.

SECTION 4: GENERAL EFFLUENT LIMITATIONS

(A) No discharge shall contain, or cause in the receiving stream, a visible oil sheen or floating solids; or, cause visible discoloration or foaming in the receiving stream.

(B) No discharge shall cause acute or chronic toxicity in the receiving water body beyond any zone of influence specifically allocated to that discharge in this permit.

(C) The temperature of any discharge shall not increase the temperature of the receiving stream above 83°F, or, in any case, raise the temperature of the receiving stream by more than 4°F. The incremental temperature increase in coastal and marine waters is limited to 1.5°F during the period including July, August and September.

SECTION 5: SPECIFIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(A) The discharges shall not exceed and shall otherwise conform to the specific terms and conditions listed below. The discharges are restricted by, and shall be monitored in accordance with, the tables below:

Table A									
Discharge Serial Number: 001-1						**Monitoring Location:** 1			
Wastewater Description: Crushed stone washing wastewater, dust suppression wastewater and incidental rainfall into the settling basins									
Monitoring Location Description: The outlet at the north end of the final treatment basin									
PARAMETER	**UNITS**	**FLOW/TIME BASED MONITORING**				**INSTANTANEOUS MONITORING**			**Minimum Level Test**
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency [2]	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample// Reporting Frequency[2]	Sample Type or measurement to be reported	
Aluminum, Total	ug/l	NA	NA	NR	NA	-----	Quarterly	Grab	*
Aquatic Toxicity[3] (Invertebrate)	%	NA	NA	NR	NA	NOAEL = 100%	Quarterly	Grab	
Aquatic Toxicity[3] (Vertebrate)	%	NA	NA	NR	NA	NOAEL = 100%	Quarterly	Grab	
Chlorine, Total Residual	ug/l	NA	NA	NR	NA	-----	Quarterly	Grab	*
Chronic Toxicity[4]	%	NA	------	Annual	Daily Composite	NA	NR	NA	
Copper, Total	ug/l	NA	NA	NR	NA	-----	Quarterly	Grab	*
Flow, day of sampling[1A](See Remark a)	gpd	NA	1,744,500	Quarterly	Daily flow	NA	NR	NA	
Flow, maximum daily[1,1A](See Remark a)	gpd	NA	1,744,500	Daily/Quarterly	Daily flow	NA	NR	NA	
pH	S.U.	NA	NA	NR	NA	6.0-9.0	Quarterly	Grab	
Iron, Total	ug/l	NA	NA	NR	NA	-----	Quarterly	Grab	*
Lead, Total	ug/l	NA	NA	NR	NA	-----	Quarterly	Grab	*
Nickel, Total	ug/l	NA	NA	NR	NA	-----	Quarterly	Grab	*
Oil Petroleum, total recoverable	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	
Surfactants	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	
Total Suspended Solids	mg/l	NA	NA	NR	NA	23.0	Quarterly	Grab	
Turbidity	NTU	NA	NA	NR	NA	-----	Quarterly	Grab	

Table Footnotes and Remarks:

Footnotes:

[1] For this parameter, the Permittee shall maintain at the facility a record of the total daily flow for each day of discharge and shall report the maximum daily flow on the DMR quarterly.

[1A] The maximum daily flow limit of 1,744,500 gpd is based in part on a calculated volume of rain that falls into the four basins, (see fact sheet for more details). This rain volume is based on a two year storm event (3.3 inches over 24 hours). For maximum daily flows which exceed 1,744,500 gpd, the Permittee would not be in violation of this flow limit if the Permittee can demonstrate that the exceedance was due to a rain event larger than 3.3 inches of rain over 24 hours.

[2] The first entry in this column is the 'Sample Frequency'. If this entry is not followed by a 'Reporting Frequency' and the 'Sample Frequency' is more frequent than monthly, then the 'Reporting Frequency' is monthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency'.

[3] The results of the Toxicity Tests are recorded in % survival, however, the Permittee shall report pass/fail on the DMR based on criteria in Section 6(B) of this permit.

[4] See Section 6(C)

*See Section 6(A)(3)

Remarks:

a. On sampling days, the Permittee shall measure the height of discharge over the weir on an hourly basis, throughout the hours of pumping operations, and shall log each measurement in a logbook. Using a flow rating curve for the v-weir, height measurements shall be converted to flow rates. The flow shall be calculated by multiplying each flow rate (gallons per minute) by a factor of 60 and the summation of the calculated flows shall be used to determine the total daily flow. On non-sampling days, the Permittee shall determine the total daily flow by summing the intake daily flow and an estimate of incidental rainfall into the settling basins on that day. The rainfall volume shall be calculated by multiplying the rainfall amount (from an on-site rain gauge or reputable weather source) by the surface area of the four settling basins.

b. All analyses shall be on the same sample.

Table B									
Discharge Serial Number: 001-1						**Monitoring Location:** 7			
Wastewater Description: Intake of sea water for DSN 001-1 and DSN 002									
Monitoring Location Description: Sample valve on the influent pipe at the south end of the site									
PARAMETER	**UNITS**	**FLOW/TIME BASED MONITORING**				**INSTANTANEOUS MONITORING**			**Minimum Level Test**
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency [2]	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample// Reporting Frequency[2]	Sample Type or measurement to be reported	
Flow, Total [1]	gpd	NA	1,344,000	Quarterly	Daily flow	NA	NR	NA	
Salinity	ppt	NA	NA	NR	NA	-----	Quarterly	Grab	
Total Suspended Solids [3]	mg/l	NA	NA	NR	NA	-----	Quarterly	Grab	
Turbidity [3]	NTU	NA	NA	NR	NA	-----	Quarterly	Grab	

Table Footnotes and Remarks:

Footnotes:

[1] For this parameter, the Permittee shall report the total flow for each day of sample collection.

[2] The first entry in this column is the 'Sample Frequency'. If this entry is not followed by a 'Reporting Frequency' and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency.'

[3] Concurrent with Effluent Monitoring of DSN001-1.

Table C	
Discharge Serial Number: 002-1	**Monitoring Location:** 1
Wastewater Description: Stone washing wastewater and dust suppression wastewater to the ground waters from infiltration basin system	
Monitoring Location Description: NR	

(1) All samples shall be comprised of only the wastewater described in this table. Samples shall be collected prior to combination with receiving waters or wastewater of any other type, and after all approved treatment units, if applicable. All samples collected shall be representative of the discharge during standard operating conditions.

(2) In cases where limits and sample type are specified but sampling is not required by this permit, the limits specified shall apply to all samples which may be collected and analyzed by the Department of Environmental Protection personnel, the Permittee, or other parties.

(3) The limits imposed on the discharges listed in this permit take effect on the issuance date of this permit, hence any sample taken after this date which, upon analysis, shows an exceedance of permit limits will be considered non-compliance.

The monitoring requirements begin on the date of issuance of this permit if the issuance date is on or before the 12th day of a month. For permits issued on or after the 13th day of a month, monitoring requirements begin the 1st day of the following month.

(4) The Permittee is authorized to discharge stone washing and dust suppression wastewaters to a designated treatment system composed of a series of five infiltration basins. At least four of the five sedimentation basins must be utilized at a time while one of the basins is being cleaned.

(5) The Permittee is not authorized to use any chemicals in the stone washing operation and treatment basin system.

(6) The Permittee shall implement the Best Management Practices documented in the facility's Operations and Maintenance Plan submitted on January 8, 2001 and the Spill Prevention Control and Countermeasures Plan/ Stormwater Pollution Prevention Plan dated April 2003 and revised in July 2009 in order to protect the waters of the state from pollution.

SECTION 6: SAMPLE COLLECTION, HANDLING AND ANALYTICAL TECHNIQUES

(A) Chemical Analysis

(1) Chemical analyses to determine compliance with effluent limits and conditions established in this permit shall be performed using the methods approved pursuant to the 40 CFR 136 unless an alternative method has been approved in writing pursuant to 40 CFR 136.4 or as provided in section 22a-430-3(j)(7) of the RCSA. Chemicals which do not have methods of analysis defined in 40 CFR 136 shall be analyzed in accordance with methods specified in this permit.

(2) All metals analyses identified in this permit shall refer to analyses for Total Recoverable Metal as defined in 40 CFR 136 unless otherwise specified.

(3) The Minimum Levels specified below represent the concentrations at which quantification must be achieved and verified during the chemical analyses for the parameters identified in Section 5 Table A. Analyses for these parameters must include check standards within ten percent of the specified Minimum Level or calibration points equal to or less than the specified Minimum Level.

Parameter	Minimum Level
Aluminum	10.0 ug/l
Chlorine, Total Residual	20.0 ug/l
Copper	5.0 ug/l
Iron	10.0 ug/l
Lead	5.0 ug/l
Nickel	5.0 ug/l

(4) The value of each parameter for which monitoring is required under this permit shall be reported to the maximum level of accuracy and precision possible consistent with the requirements of this section of the permit.

(5) Effluent analyses for which quantification was verified during the analysis at or below the minimum levels and which indicate that a parameter was not detected shall be reported as "less than "x" where "x" is the numerical value equivalent to the analytical method detection limit for that analysis.

(6) Results of effluent analyses which indicate that a parameter was not present at a concentration greater than or equal to the Minimum Level specified for that analysis shall be considered equivalent to zero (0.0) for purposes of determining compliance with effluent limitations or conditions specified in this permit.

(7) The analytical method used to determine the concentration of total residual Chlorine shall be Standard Methods 4500-Cl-F (DPD Ferrous Titrimetric Method).

(B) Acute Aquatic Toxicity Test

(1) Samples for monitoring of Aquatic Toxicity shall be collected and handled as prescribed in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA/821-R-02-012).

(a) Grab samples shall be chilled immediately following collection. Samples shall be held at 4 degrees Centigrade until Aquatic Toxicity testing is initiated.

(b) Effluent samples shall not be; dechlorinated, filtered, or, modified in any way, prior to testing for Aquatic Toxicity unless specifically approved in writing by the Commissioner for monitoring at this facility.

(c) Chemical analyses of the parameters identified in Section 5 Table A shall be conducted on an aliquot of the same sample tested for Aquatic Toxicity.

(i) At a minimum, pH, specific conductance, salinity, total alkalinity and total residual chlorine shall be measured in the effluent sample and, during Aquatic Toxicity tests, in the highest concentration of test solution and in the dilution (control) water at the beginning of the test and at test termination. Dissolved oxygen, pH, and temperature shall be measured in the control and all test concentrations at the beginning of the test, daily thereafter, and at test termination. Salinity shall be measured in each test concentration at the beginning of the test and at test termination.

(ii) For tests with saltwater organisms, which require salinity adjustment of the

effluent, chemical analyses, shall be conducted on an aliquot of the effluent sample collected for Aquatic Toxicity testing and on an aliquot of the effluent following salinity adjustment. Both sets of results shall be reported on the Aquatic Toxicity Monitoring Report (ATMR).

(d) Tests for Aquatic Toxicity shall be initiated within 24 hours of sample collection.

(2) Monitoring for Aquatic Toxicity to determine compliance with the permit limit on Aquatic Toxicity (invertebrate) above shall be conducted for 48-hours utilizing neonatal Mysidopsis bahia (1-5 days old with no more than 24-hours range in age).

(3) Monitoring for Aquatic Toxicity to determine compliance with the permit limit on Aquatic Toxicity (vertebrate) above shall be conducted for 48-hours utilizing larval Cyprinodon variegatus (1-14 days old with no more than 24-hours range in age).

(4) Tests for Aquatic Toxicity shall be conducted as prescribed for static non-renewal acute tests in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA/821-R-02-012), except as specified below.

(a) For Aquatic Toxicity Limits, expressed as an NOAEL value, Pass/Fail (single-concentration) tests shall be conducted at a specified Critical Test Concentration (CTC) equal to the Aquatic Toxicity Limit, as prescribed in section 22A-430-3(j)(7)(A)(i) of the Regulations of Connecticut State Agencies, except that five replicates of undiluted effluent and five replicates of effluent diluted to the CTC shall be included.

(b) Mysids may be fed during the tests.

(c) Aquatic toxicity tests with saltwater organisms shall be conducted at a salinity of 24 parts per thousand, plus or minus 2 ppt. If the effluent salinity is greater than 26 ppt, no salinity adjustment is needed.

(i) Sodium lauryl sulfate or sodium dodecyl sulfate shall be used as the reference toxicant.

(ii) Synthetic seawater for use as controls shall be prepared with deionized water and artificial sea salts as described in EPA/821-R-02-012.

(iii) If the salinity of the source water is more that 5 parts per thousand higher, or lower than the culture water used for rearing the organisms, a second set of controls matching the salinity of the culture water shall be added to the test series. Test validity shall be determined using the controls adjusted to match the source water salinity.

(iv) Salinity adjustment that may be required in tests with saltwater organisms shall utilize the minimum amount of synthetic hypersaline brine (not to exceed 100 parts per thousand) or dilute (2 parts per thousand) synthetic seawater necessary to achieve the required salinity. Salinity adjustment may also be met with the addition of artificial sea salts.

(v) The actual effluent concentrations in definitive tests with saltwater organisms shall be used in calculating test results.

(5) Compliance with limits on Aquatic Toxicity shall be determined as follows:

(a) For limits expressed as an NOAEL value, compliance shall be demonstrated when the results of a valid pass/fail Aquatic Toxicity test indicates there is greater than 50% survival in the undiluted effluent and 90% or greater survival in the effluent at the specified CTC.

(C) The Permittee shall annually monitor the chronic toxicity of the DSN 001-1 in accordance with the following specifications.

(1) Chronic toxicity testing of the discharge shall be conducted annually during July, August, or September of each year.

(2) Chronic toxicity testing shall be performed on the discharge in accordance with the test methodology established in "Short term Methods For Estimating The Chronic Toxicity of Effluents and Receiving Water to Marine and Freshwater Organisms" (EPA-821-R-02-014) as referenced in 40 CFR 136 for Mysidopsis bahia survival, growth and fecundity (Method 1007.0) and Cyprinodon variegatus larval survival and growth (Method 1004.0).

(3) Chronic toxicity tests shall utilize a minimum of five effluent dilutions prepared using a dilution factor of 0.5 (100% effluent, 50% effluent, 25 % effluent, 12.5 % effluent, 6.25 % effluent, 0 % effluent).

(4) Long Marsh Creek water collected immediately upstream of the area influenced by the discharge shall be used as site water control (0% effluent) and dilution water in the toxicity tests.

(5) A laboratory water control consisting of synthetic freshwater prepared in accordance with EPA-821-R-02-013 at a hardness of 50±5 mg/l shall be included in the test protocol in addition to the site-water control.

(6) Daily composite samples of the discharge and grab samples of the Long Marsh Creek for use as site water control and dilution water shall be collected on: day 0, for test solution renewal on day 1 and day 2 of the test; day 2, for test solution renewal on day 3 and day 4 of the test; and day 4, for test solution renewal on day 5, 6, and 7 of the test. Samples shall not be dechlorinated, pH or hardness adjusted, or chemically altered in any way.

(7) All samples of the discharge and the Long Marsh Creek water used in the chronic toxicity test shall, at a minimum, be analyzed and results reported in accordance with the provisions listed in Section 6(A) of this permit for the following parameters:

pH	Nickel (Total recoverable and dissolved)
Hardness	Nitrogen, Ammonia (total as N)
Alkalinity	Nitrogen, Nitrate (Total as N)
Conductivity	Phosphorus, Total
Chlorine, (Total residual)	Solids, Total Suspended
Copper (Total recoverable and dissolved)	Zinc (Total recoverable and dissolved)

SECTION 7: REPORTING REQUIREMENTS

(A) The results of chemical analyses and any aquatic toxicity test required above shall be entered on the Discharge Monitoring Report (DMR), provided by this office, and reported to the Bureau of Materials Management and Compliance Assurance (Attn: DMR Processing) at the following address. The report shall also include a detailed explanation of any violations of the limitations specified. The DMR shall be received at this address by the last day of the month following the month in which samples are collected.

Bureau of Materials Management and Compliance Assurance
Water Permitting and Enforcement Division (Attn: DMR Processing)
Connecticut Department of Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

(B) Complete and accurate aquatic toxicity test data, including percent survival of test organisms in each replicate test chamber, LC50 values and 95% confidence intervals for definitive test protocols, and all supporting chemical/physical measurements performed in association with any aquatic toxicity test, including measured daily flow and hours of operation for the 30 consecutive operating days prior to sample collection if compliance with a limit on Aquatic Toxicity is based on toxicity limits based on actual flows described in Section 7, shall be entered on the Aquatic Toxicity Monitoring Report form (ATMR) and sent to the Bureau of Water Protection and Land Reuse at the following address. The ATMR shall be received at this address by the last day of the month following the month in which samples are collected.

Bureau of Water Protection and Land Reuse (Attn: Aquatic Toxicity)
Connecticut Department of Environmental Protection
79 Elm St.
Hartford, CT 06106-5127

(C) If this permit requires monitoring of a discharge on a calendar basis (e.g. Monthly, quarterly, etc.), but a discharge has not occurred within the frequency of sampling specified in the permit, the Permittee must submit the DMR and ATMR, as scheduled, indicating "NO DISCHARGE". For those Permittees whose required monitoring is discharge dependent (e.g. per batch), the minimum reporting frequency is monthly. Therefore, if there is no discharge during a calendar month for a batch discharge, a DMR must be submitted indicating such by the end of the following month.

SECTION 8: RECORDING AND REPORTING OF VIOLATIONS, ADDITIONAL TESTING REQUIREMENTS

(A) If any sample analysis indicates that an Aquatic Toxicity effluent limitation in Section 5 of this permit has been exceeded or that the test was invalid, another sample of the effluent shall be collected and tested for Aquatic Toxicity and associated chemical parameters, as described above in Section 5 and Section 6, and the results reported to the Bureau of Materials Management and Compliance Assurance (Attn: DMR Processing), at the address listed above, within 30 days of the exceedance or invalid test. Results of all tests, whether valid or invalid, shall be reported.

(B) If any two consecutive test results or any three test results in a twelve month period indicates that an Aquatic Toxicity Limit has been exceeded, the permittee shall immediately take all reasonable steps to eliminate toxicity wherever possible and shall submit a report to Bureau of Materials Management and Compliance Assurance (Attn: Aquatic Toxicity) for the review and approval of the Commissioner in accordance with section 22a-430-3(j)(10)(c) of the RCSA describing proposed steps to eliminate the toxic impact of the discharge on the receiving water body. Such a report shall include a proposed time schedule

to accomplish toxicity reduction and the permittee shall comply with any schedule approved by the Commissioner.

(C) The Permittee shall notify the Bureau of Materials Management and Compliance Assurance, Water Permitting and Enforcement Division, within 72 hours and in writing within thirty days of the discharge of any substance listed in the application but not listed in the permit if the concentration or quantity of that substance exceeds two times the level listed in the application.

This permit is hereby issued on the May 3, 2010.

Amey W. Marrella
Commissioner

DATA TRACKING AND TECHNICAL FACT SHEET

Permittee: *Tilcon Connecticut, Inc.*

PERMIT, ADDRESS, AND FACILITY DATA

PERMIT #s: CT0000906 & GW0000001 APPLICATION #s: 200602980 & 200603096 FACILITY ID: 014-037

Mailing Address:	***Location Address:***
Street: *P.O. Box 1357, Black Rock Avenue*	***Street:*** *190 Totoket Road*
City: *New Britain* ***ST:*** *CT* ***Zip:*** *06050*	***City:*** *Branford* ***ST*** *CT* ***Zip:*** *06405*
Contact name: *Frank T. Lane*	***Contact name:*** *Frank T. Lane*
Phone No.: *(203) 484-1418*	***Phone No.:*** *(203) 484-1418*

PERMIT INFORMATION

DURATION *5 YEAR X 10 YEAR 30 YEAR*

TYPE *New Reissuance X (NPDES and GW) Modification*

CATEGORIZATION *POINT (X) NON-POINT ( ) GIS # 6418*

NPDES (X) PRETREAT () GROUND WATER (UIC) () GROUND WATER (OTHER) (X)

NPDES MAJOR (MA)
NPDES SIGNIFICANT MINOR or PRETREAT SIU (SI) X
NPDES or PRETREATMENT MINOR (MI)

PRETREAT SIGNIFICANT INDUS USER (SIU) NA
PRETREAT CATEGORICAL (CIU) NA
Note: If it's a CIU then check off SIU

POLLUTION PREVENTION MANDATE *ENVIRONMENTAL EQUITY ISSUE*

COMPLIANCE ISSUES

COMPLIANCE SCHEDULE YES NO X

POLLUTION PREVENTION TREATMENT REQUIREMENT WATER CONSERVATION

WATER QUALITY REQUIREMENT REMEDIATION OTHER

IS THE PERMITTEE SUBJECT TO A PENDING ENFORCEMENT ACTION? NO X YES

OWNERSHIP CODE

Private X Federal State Municipal (town only) Other public

DEP STAFF ENGINEER *Oluwatoyin Fakilede*

PERMIT FEES

Discharge Code	*DSN Number*	*Annual Fee*
101037Z	*DSN001-1* *DSN002*	*$8,425.00*

FOR NPDES DISCHARGES

Drainage basin Code: *5000* ***Present/Future Water Quality Standard:*** *SB/SA*

FOR UIC PERMITS

Drainage basin Code: *5000* ***Water Quality Standard:*** *GA* ***Total Wells*** *NA* ***Well Type*** *NA*

NATURE OF BUSINESS GENERATING DISCHARGE

The Pine Orchard Dock is a marine terminal used for loading graded material (crushed stone) on to scows by conveyor. The crushed stone is delivered to covered storage hoppers from the North Branford quarry by a dedicated railroad system called the Branford Steam Railroad. When requested by clients, crushed stone is washed with seawater to remove fines before loading.

PROCESS AND TREATMENT DESCRIPTION (by DSN)

The wastewater generated from the crushed stone washing operation is discharged to a series of five sedimentation and infiltration basins. Historically, only four of the five sedimentation basins are utilized at a time while one of the basins is being cleaned. This permit requires that at least four basins must be in service at any time.

The surface water discharge occurs at the effluent pipe of the final settling basin. The groundwater discharge occurs throughout all the infiltration basins in the South Central Shoreline Watershed.

RESOURCES USED TO DRAFT PERMIT

X	*Federal Effluent Limitation Guideline 40CFR 436 Mineral Mining and Processing Point Source Category- Subpart B- Crushed Stone Subcategory* *name of category*
__	*Performance Standards*
__	*Federal Development Document* *name of category*
__	*Treatability Manual*
X	*Department File Information*
__	*Connecticut Water Quality Standards*
__	*Anti-degradation Policy*

_X_ *Coastal Management Consistency Review Form*
(No changes are proposed on-site so this form was not required to be submitted)

_X_ *Other – Explain*

BASIS FOR LIMITATIONS, STANDARDS OR CONDITIONS

_X_ *Best Professional Judgment (See Comments)*

COMMENTS

The facility has not discharged stone wash wastewater to surface waters for the five years preceding this permit reissuance. This is because no stone washing activities have taken place at the facility. However, the Permittee has asked that this permit be renewed in case clients make the request to perform stone washing operations in the future.

Whole effluent toxicity limits were included in this permit. An annual chronic toxicity testing requirement was also included in the permit.

The need for inclusion of water quality based discharge limitations in this permit was evaluated consistent with Connecticut Water Quality Standards and Criteria (CTWQS&C), pursuant to 40 CFR 122.44(d). Based on monitoring data from the Tilcon Pine Orchard site, other Tilcon quarries and other similar facilities in the state, water quality based limitations are not required at this time.

Monitoring requirements for aluminum, copper, iron, lead and nickel were included in the previous permit to develop the data necessary for evaluation of these pollutants in the wastewater. However, since there was no wastewater discharge since the last permit issuance, monitoring for these parameters remains as it was in the previous permit.

Total suspended solid data is a consistent indicator that the settling lagoons are providing treatment; therefore the limit for total suspended solids is consistent with previous permit.

The Permittee uses city water for dust suppression at the site. The Department is requiring monitoring for chlorine, total residual because chlorinated city water for dust suppression may combine with the crushed stone washing wastewater.

The maximum daily flow limit at DSN 001-1of 1,744,500 gallons is a summation of 1,344,000 gallons of the intake flow, approximately 200 gallons of city water for dust suppression and 400,300 gallons of incidental rainfall into the settling basins. The volume of rainfall for a 24 hour period was calculated by multiplying the total area of the settling basins which is 194,575 sq.ft. with 3.3 inches of rain. The 3.3 inches was taken from the attached Appendix from Connecticut DOT drainage manual using the section for 2 year statistics of New Haven County rainfall.

Oil Petroleum (total recoverable) replaces the oil and grease (Hydrocarbon fraction) parameter from the previous permit.

The previous permit was issued after receiving the attached memo from Planning and Standards Division dated September 5, 2001, that states the discharges are consistent with the CTWQS&C.