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),

ECC Corporation

is authorized to discharge from a facility located at

156 Princeton Street Holden, MA 01522

to receiving water named Asnebumskit Brook

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

This permit shall become effective on 60 days after signature.

This permit and the authorization to discharges expire at midnight, 3 years from the effective date.

This permit supersedes the permit issued on November 29, 1996 and modified on November 2, 2000.

This permit consists of (7) pages in Part I including effluent limitations, monitoring requirements, etc., Attachments A Freshwater Chronic Toxicity Test Procedure & Protocol; Attachment B, Freshwater Acute Toxicity Test Procedure & Protocol; Attachment C, SWPP Guidance; and 35 pages in Part II including General Conditions and Definitions.

Signed this 13th day of August, 2002

/Signature on File/ Linda M. Murphy, Director Office of Ecosystem Protection Environmental Protection Agency Boston, MA

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

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date and lasting through expiration the permittee is authorized to discharge from outfall serial number 002 groundwater and stormwater.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent	Discharge Limitations	Mo	nitoring Requireme	<u>nt</u>
<u>Characteristic</u>				
	Average	Maximum	Measurement	Sample
<u>Groundwater</u>	<u>Monthly</u>	<u>Daily</u>	Frequency	<u>Type</u>
Total Flow, mgd	0.0072	0.0144	1/Day ¹	Estimate
Total Copper, ug/l (Feb May)	0.0072	699.0	1/Bay 1/Month	Composite ¹⁰
Total Copper, ug/l (Jun - Jan.)		73	1/Month	Composite ¹⁰
pH (s.u.)	(see Footnote No.7)	73	1/Month	Grab
LC50 ²	-	50% ⁴	2/Year ³	Composite ¹⁰
C-NOEC ⁵	-	-	2/year ³	Composite ¹⁰
Stormwater ⁸				
Total Flow (MGD)	_	Report	1/Quarter	Estimate
BOD (mg/l)	-	Report	1/Quarter	Composite
TSS(mg/l)	-	Report	1/Quarter	Composite
Oil and Grease (mg/l)	-	Report	l/Quarter9	Grab
pH (su)	-	Report	1/Quarter	Grab
Copper (ug/l), Total	-	Report	1/Quarter	Composite
Lead (ug/l), Total	-	Report	l/Quarter	Composite
Cadmium (ug/l), Total	-	Report	1/Quarter	Composite
Zinc (ug/l), Total	-	Report	1/Quarter	Composite
$LC50^2$	-	100%4	4/year ⁶	Composite

Footnotes:

- 1. The monthly average and maximum daily flows shall be estimated and reported for each monitoring event.
- 2. LC50 is the concentration of effluent in a sample that causes mortality to 50% of the test population at a specific time of observation.
- 3. The permittee shall perform two chronic and modified acute toxicity tests during the months between February and May using <u>Ceriodaphnia dubia</u> and <u>Pimephales promelas</u> (See Attachment A). The test results to be submitted after two months following each test respectively. One test shall be performed as early in the February May period as possible and the next test shall be performed no sooner than one month following the first. If there is no discharge during the period beginning 30 days after the first test and the end of May, the permittee is excused from performing the second test.
- 4. 50% and 100% are defined as a sample with 50% and 100% effluent respectively.
- 5. No-observed Chronic Effect Concentration (C-NOEC) is the highest concentration of toxicant or effluent to which organisms are exposed in a life-cycle or partial life-cycle test which causes no adverse effect (on growth, survival, and reproduction).
- 6. The permittee shall perform acute toxicity tests quarterly during the months of February, May, August and November using <u>Ceriodaphnia dubia</u> and <u>Pimephales promelas</u> (See Attachment B). The test results to be submitted during the months of April, July, October and January respectively.
- 7. The pH shall be in the range of 6.5 8.3 standard units and shall be monitored monthly with a grab sample. The receiving water downstream of the discharge shall be no more than 0.5 units outside of the background range.
- 8. All stormwater samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previous (greater than 0.1 inch rainfall) storm event. Flow rates shall be based on multiple estimates taken during and immediately following the storm events. The average and maximum flow rates shall be reported for each storm event. Grab samples shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first hour of the discharge, and the discharger shall submit with the monitoring report a description of
 - why a grab sample during the first 30 minutes was impracticable. Composite samples shall consist of a minimum of three grab samples of equal volume with the first grab sample collected in accordance with the above defined grab sample procedures, and the remaining grab sample separated by a minimum of one hour.

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The permittee shall provide the date and duration (in hours) of the storm events sampled; rainfall measurements or estimates (in inches) for the storm events sampled; and the duration between the storm events sampled and the end of the previous measurable storm event.

- 9. Use EPA method 1664 for oil and grease testing.
- 10. Groundwater composite samples can consist of a series of three grab samples taken over a 24 hour period. For stormwater sampling see footnote # 8.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS(cont.)

- 2. a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
 - b. The effluent shall not cause a visible oil sheen nor an objectionable discoloration of the receiving water.
 - c. The discharge shall not cause violations of water quality standards of the receiving water which have been or may be promulgated.
 - d. The effluent shall not contain materials in concentrations or combinations which are hazardous or toxic to human health, aquatic life of the receiving water or which would impair the uses designated by its classification.
 - e. If compliance has been demonstrated for 12 months, this permit may be modified to reduce or eliminate effluent monitoring. Alternatively, EPA may modify this permit to incorporate numerical effluent limitations for pollutants.

After submitting 4 consecutive sets of whole effluent toxicity test results (stormwater only), demonstrating compliance with the permit limits for whole effluent toxicity, the permittee may request a reduction in the frequency of required toxicity testing to 1/year. The permittee is required to continue testing at the frequency specified in the permit until notice is received by certified mail from the EPA that the whole effluent testing requirement has been changed.

- 3. This permit shall be modified, or revoked and reissued to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Act, if the effluent standard or limitation so issued or approved:
 - (1) contains different conditions or is otherwise more stringent than any effluent limitation in this permit; or
 - (2) controls any pollutant not limited by this permit.
 - If the permit is modified or reissued, it shall be revised to reflect all currently applicable requirements of the Act.
- 4. 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 or frequent 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 ug/l);
 - (2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2, 4-dinitrophenol and for 2- methyl-4, 6-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 ug/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); or
- (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.

B. STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

The Permittee shall update and implement the existing Storm Water Pollution Prevention Plan (SWPPP). The updated SWPPP for this facility shall be prepared, and except as provided elsewhere in this permit, shall provide for compliance with the terms of the permit and the plan, no later than 90 days after the effective date of the permit. The SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with activity from the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants including metals in storm water discharges associated with the terms and conditions of this permit. Attachment C provides a guidance to prepare a SWPPP for this facility.

By May 1 of each year the permittee shall submit an annual report on progress made in implementing the above requirements to increase the effectiveness of the SWPPP.

C. 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 the Director and the State at the following addresses:

Environmental Protection Agency Water Technical Unit (SEW) P.O. Box 8127 Boston, Massachusetts 02114 The state agency is:

Massachusetts Department of Environmental Protection
Bureau of Waste Prevention
Central Regional Office
627 Main Street
Worcester, Massachusetts 01608

Signed and dated Discharge Monitoring Report Forms and toxicity test reports required by this permit shall also be submitted to the state at:

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

C. STATE PERMIT CONDITIONS

This discharge permit is issued jointly by the U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (DEP) 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 MA DEP pursuant to M.G.L. Chap. 21 §43.

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 an 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.