

February 15, 2008

Mr. Patrick Cloutier
South Portland Water Pollution Control Facility
P. O. Box 9422
South Portland, Maine 04116-9422

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100633
Maine Waste Discharge License (WDL) Application #W001370-5M-H-M
Final Permit/License Modification

Dear Mr. Cloutier:

Enclosed please find a copy of your **final** MEPDES permit and Maine WDL **modification** which was approved by the Department of Environmental Protection. Please read the permit/license modification and its attached conditions carefully. You must follow the conditions in the order to satisfy the requirements of law. Any discharge not receiving adequate treatment is in violation of State Law and is subject to enforcement action.

Any interested person aggrieved by a Department determination made pursuant to applicable regulations, may appeal the decision following the procedures described in the attached DEP FACT SHEET entitled "*Appealing a Commissioner's Licensing Decision.*"

If you have any questions regarding the matter, please feel free to call me at 287-7693.

Sincerely,

Gregg Wood
Division of Water Quality Management
Bureau of Land and Water Quality

Enc.

cc: Stuart Rose, DEP/SMRO
John True, DEP/CMRO
Steve Hinchman, CLF
Sandy Lao, USEPA

IN THE MATTER OF

CITY OF SOUTH PORTLAND) MAINE POLLUTANT DISCHARGE
PUBLICLY OWNED TREATMENT WORKS) ELIMINATION SYSTEM PERMIT
SOUTH PORTLAND, CUMBERLAND CTY., ME.) AND
ME0100633) WASTE DISCHARGE LICENSE
W001370-5M-H-M) **APPROVAL**) **MODIFICATION**

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 USC, Section 1251, et. seq. and Maine Law 38 M.R.S.A., Section 414-A et seq., and applicable regulations, the Department of Environmental Protection (the Department hereinafter) has considered the application of the CITY OF SOUTH PORTLAND (City hereinafter), with its supportive data, agency review comments, and other related material on file and finds the following facts:

APPLICATION SUMMARY

The City has applied to the Department for modification of combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100633/Waste Discharge License (WDL) #W001370-5M-F-R (permit hereinafter) which was issued by the Department on April 23, 2004 and is due to expire on April 23, 2009. The 4/23/04 permit authorized the discharge of up to a monthly average flow of 9.3 million gallons per day (MGD) of secondary treated sanitary waste waters and an unspecified quantity of excess combined sanitary and storm water receiving primary treatment only from a municipal waste water treatment facility to the Fore River, Class SC, in South Portland, Maine. The 4/23/04 permit also authorized the discharge of untreated combined sanitary and storm water from eight (8) combined sewer overflow (CSO) outfalls to six (6) different receiving waters that are classified as either Class C or Class SC pursuant to Maine law.

It is noted the 4/23/04 permit was modified on 12/22/06 to eliminate 3 CSO outfalls, CSO Outfall #004 (Long Creek), CSO Outfall #021 (Main Street Pump Station) and CSO Outfall #028 (Clifford Street) in Special Condition L(1) of the 4/23/04 permit and modified the date for the submission of a CSO Master Plan update to the Department from November 30, 2006 to December 31, 2007, in Special Condition L(1) of the 4/23/04 permit.

MODIFICATION REQUESTED

The permittee has requested the Department change the date for the submission of an updated CSO Master Plan in Special Condition L(4) of the 12/22/06 permit modification from December 31, 2007 to September 30, 2008 and re-authorize the discharge of untreated sanitary waste water/ storm water from Outfall #004 (Long Creek).

PERMIT SUMMARY

1. This permitting action is granting the permittee's requested to change the date for the submission of an updated CSO Master Plan in Special Condition L(4) of the 12/22/06 permit modification from December 31, 2007 to September 30, 2008.
2. Authorizing discharges of untreated sanitary waste water/ storm water from CSO Outfall #004 (Long Creek).

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated January 9, 2008, and subject to the Conditions listed below, the Department makes the following CONCLUSIONS:

Secondary and Primary Treated Waste Waters:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.
2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.
3. The provisions of the State's antidegradation policy, 38 MRS Section 464(4)(F), will be met, in that:
 - a. Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
 - b. Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;
 - c. The standards of classification of the receiving water body are met or, where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;
 - d. Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification, that higher water quality will be maintained and protected; and
 - e. Where a discharge will result in lowering the existing quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
4. The discharges [including the six (6) combined sewer overflows (CSOs)] will be subject to effluent limitations that require application of best practicable treatment.

ACTION

THEREFORE, the Department APPROVES the application of the CITY OF SOUTH PORTLAND, to modify the date of submission of an updated CSO Master Plan from December 31, 2007 to September 30, 2008. The discharges up to a monthly average flow of 9.3 million gallons per day (MGD) of secondary treated sanitary waste waters and an unspecified quantity of excess combined sanitary and storm water receiving primary treatment only from a municipal waste water treatment facility and untreated combined sanitary and storm water from six (6) combined sewer overflow (CSO) outfalls to five different Class C and Class SC receiving waters in South Portland shall be subject to the attached conditions and all applicable standards and regulations including;

1. *“Maine Pollutant Discharge Elimination System Permit, Standard Conditions Applicable To All Permits,”* revised July 2, 2001, copy attached to MEPDES permit #ME0100633/WDL #W001370-5M-F-R issued by the Department on April 23, 2004.
2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
3. All terms and conditions in MEPDES permit #ME0100633/WDL #W001370-5M-F-R issued by the Department on April 23, 2004, modified on December 22, 2006, not modified by this permitting action, remain in effect and enforceable.
4. **This permit modification expires on April 23, 2009**, concurrent with MEPDES permit #ME0100633/WDL #W001370-5M-F-R issued by the Department on April 23, 2004.

DONE AND DATED AT AUGUSTA, MAINE, THIS 19th DAY OF February, 2008.

COMMISSIONER OF ENVIRONMENTAL PROTECTION

BY: _____
DAVID P. LITTELL, Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application _____ December 20, 2007 _____.

Date of application acceptance _____ January 4, 2008 _____.

Date filed with Board of Environmental Protection _____
This Order prepared by GREGG WOOD, BUREAU OF LAND & WATER QUALITY

SPECIAL CONDITIONS

L. COMBINED SEWER OVERFLOWS (CSO's)

Pursuant to Chapter 570 of Department Rules, *Combined Sewer Overflow Abatement*, the permittee is authorized to discharge from the following locations of combined sewer overflows (CSO's) (stormwater and sanitary wastewater) subject to the conditions and requirements herein.

1. CSO locations

<u>Outfall No./Name</u>	<u>Outfall Location</u>	<u>Receiving Water and Class</u>
004 – Long Creek	Long Creek Pump Station	Long Creek, Class SC
005 Cash Corner	Main Street/Cash Corner	Calvery Pond, Class C
006 Broadway/Evans	Evans & Broadway	Barberry Ck/Fore R., Class C/SC
018 Front Street	Front Street Pump Station	Portland Harbor, Class SC
019 West High Street	W. High Street Pump Sta.	Portland Harbor, Class SC
024 Elm Street	Turners Island	Fore River, Class SC

2. Prohibited Discharges

- a) The discharge of dry weather flows is prohibited. All such discharges shall be reported to the Department in accordance with Standard Condition D (1) of this permit.
- b) No discharge shall occur as a result of mechanical failure, improper design or inadequate operation or maintenance.
- c) No discharges shall occur at flow rates below the maximum design capacities of the wastewater treatment facility, pumping stations or sewerage system.

3. Narrative Effluent Limitations

- a) The effluent shall not contain a visible oil sheen, settled substances, foam, or floating solids at any time that impair the characteristics and designated uses ascribed to the classification of the receiving waters.
- b) The effluent shall not contain materials in concentrations or combinations that are hazardous or toxic to aquatic life; or which would impair the usage designated by the classification of the receiving waters.

SPECIAL CONDITIONS

L. COMBINED SEWER OVERFLOWS (CSO's)

c) The discharge shall not impart color, turbidity, toxicity, radioactivity or other properties that cause the receiving waters to be unsuitable for the designated uses and other characteristics ascribed to their class.

4. CSO Master Plan (see Sections 2 & 3 of Chapter 570 Department Rules)
The permittee shall implement CSO control projects in accordance with an approved CSO Master Plan and abatement schedule. The CSO Master Plan entitled *South Portland, Maine, Combined Sewer Overflow Facilities Plan*, dated October 1, 1993 was original approved by the Department on September 29, 1994.

Key milestones approved in most recent abatement schedule that the permittee is required to comply with are:

By September 30, 2008 (PCS Code 06699), the permittee shall submit an updated CSO Master Plan and abatement schedule for review and approval by the Department. All abatement work approved by the Department shall be completed pursuant to the implementation schedule in the Master Plan.

To modify the date and or project specified above (but not dates within the Master Plan), the permittee must file an application with the Department to formally modify this permit. The work items identified in the abatement schedule may be amended from time to time based upon approval by the Department. The permittee must notify the Department in writing prior to any proposed changes to the implementation schedule.

5. Nine Minimum Controls (NMC) (see Section 5 Chapter 570 of Department Rules)

The permittee shall implement and follow the Nine Minimum Control documentation as approved by EPA on May 29, 1997. Work performed on the Nine Minimum Controls during the year shall be included in the annual CSO Progress Report (see below).

6. CSO Compliance Monitoring Program (see Section 6 Chapter 570 of Department Rules)

The permittee shall conduct block testing or flow monitoring according to an approved *Compliance Monitoring Program* on all CSO points, as part of the CSO Master Plan. Annual flow volumes for all CSO locations shall be determined by actual flow monitoring, or by estimation using a model such as EPA's Storm Water Management Model (SWMM).

SPECIAL CONDITIONS

L. COMBINED SEWER OVERFLOWS (CSO's)

Results shall be submitted annually as part of the annual *CSO Progress Report* (see below), and shall include annual precipitation, CSO volumes (actual or estimated) and any block test data required. Any abnormalities during CSO monitoring shall also be reported. The results shall be reported on the Department form "*CSO Activity and Volumes*" (Attachment B of the 4/23/04 MEPDES permit) or similar format and submitted to the Department on diskette.

CSO control projects that have been completed shall be monitored for volume and frequency of overflow to determine the effectiveness of the project toward CSO abatement. This requirement shall not apply to those areas where complete separation has been completed and CSO outfalls have been eliminated.

7. Additions of New Wastewater (see Section 8 Chapter 570 of Department Rules)

Chapter 570 Section 8 lists requirements relating to any proposed addition of wastewater to the combined sewer system. Documentation of the new wastewater additions to the system and associated mitigating measures shall be included in the annual *CSO Progress Report* (see below). Reports must contain the volumes and characteristics of the wastewater added or authorized for addition and descriptions of the sewer system improvements and estimated effectiveness.

8. Annual CSO Progress Reports (see Section 7 of Chapter 570 of Department Rules) **By March 1** (*PCS Code 33101*), of each year the permittee shall submit *CSO Progress Reports* covering the previous calendar year (January 1 to December 31). The CSO Progress Report shall include, but is not necessarily limited to, the following topics as further described in Chapter 570: CSO abatement projects, schedule comparison, progress on inflow sources, costs, flow monitoring results, CSO activity and volumes, nine minimum controls update, sewer extensions, and new commercial or industrial flows.

The CSO Progress Reports shall be completed on a standard form *entitled "Annual CSO Progress Report"*, furnished by the Department, and submitted in electronic form, if possible, to the following address:

CSO Coordinator
Department of Environmental Protection
Bureau of Land and Water Quality
Division of Water Quality Management
17 State House Station
Augusta, Maine 04333
e-mail: CSOCoordinator@maine.gov

SPECIAL CONDITIONS

L. COMBINED SEWER OVERFLOWS (CSO's)

9. Signs

If not already installed, the permittee shall install and maintain an identification sign at each CSO location as notification to the public that intermittent discharges of untreated sanitary wastewater occur. The sign must be located at or near the outfall and be easily readable by the public. The sign shall be a minimum of 12" x 18" in size with white lettering against a green background and shall contain the following information:

**CITY OF SOUTH PORTLAND
WET WEATHER
SEWAGE DISCHARGE
CSO # AND NAME**

10. Definitions

For the purposes of this permitting action, the following terms are defined as follows:

- a. Combined Sewer Overflow - a discharge of excess waste water from a municipal or quasi-municipal sewerage system that conveys both sanitary wastes and storm water in a single pipe system and that is in direct response to a storm event or snowmelt.
- b. Dry Weather Flows - flow in a sewerage system that occurs as a result of non-storm events or are caused solely by ground water infiltration.
- c. Wet Weather Flows - flow in a sewerage system that occurs as a direct result of a storm event, or snowmelt in combination with dry weather flows.

**MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
MAINE WASTE DISCHARGE LICENSE**

FACT SHEET

Date: **January 9, 2008**

PERMIT NUMBER: **ME0100633**
LICENSE NUMBER: **W001370-5M-H-M**

NAME AND ADDRESS OF APPLICANT:

**CITY OF SOUTH PORTLAND
P.O. Box 9422
South Portland, Maine 04116-9422**

COUNTY: **Cumberland County**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

**South Portland Water Pollution Control Facility
111 Waterman Drive
South Portland, Maine 04116-9422**

RECEIVING WATER/CLASSIFICATION: **Fore River/Class SC**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Mr. Patrick Cloutier, Director
Water Resource Protection
(207) 767-7675**

1. APPLICATION SUMMARY

The City has applied to the Department for modification of combination Maine Pollutant Discharge Elimination System (MEPDES) permit #ME0100633/Waste Discharge License (WDL) #W001370-5M-F-R (permit hereinafter) which was issued by the Department on April 23, 2004 and is due to expire on April 23, 2009. The 4/23/04 permit authorized the discharge of up to a monthly average flow of 9.3 million gallons per day (MGD) of secondary treated sanitary waste waters and an unspecified quantity of excess combined sanitary and storm water receiving primary treatment only from a municipal waste water treatment facility to the Fore River, Class SC, in South Portland, Maine. The 4/23/04 permit also authorized the discharge of untreated combined sanitary and storm water from eight (8) combined sewer overflow (CSO) outfalls to six (6) different receiving waters that are classified as either Class C or Class SC pursuant to Maine law.

1. APPLICATION SUMMARY (cont'd)

It is noted the 4/23/04 permit was modified on 12/22/06 to eliminate 3 CSO outfalls, CSO Outfall #004 (Long Creek), CSO Outfall #021 (Main Street Pump Station) and CSO Outfall #028 (Clifford Street) in Special Condition L(1) of the 4/23/04 permit and modified the date for the submission of a CSO Master Plan update to the Department from November 30, 2006 to December 31, 2007, in Special Condition L(1) of the 4/23/04 permit.

2. MODIFICATION REQUESTED

The permittee has requested the Department change the date for the submission of an updated CSO Master Plan in Special Condition L(4) of the 12/22/06 permit modification from December 31, 2007 to September 30, 2008 and re-authorize the discharge of untreated sanitary waste water/ storm water from Outfall #004 (Long Creek).

The application for said modification contains the following text justifying the request:

“While flow monitoring efforts to date were valuable in determining relative I/I contributions from the various drainage areas and in setting up and initially calibrating the Stormwater Management Model (SWMM), additional data is needed to refine SWMM and to allow for greater accuracy in predicting the overflow activity for storms of greater intensity (1-, 2-, 5- or 10-year, 24 hour storm event). Initial runs of the model using the minor storm for calibration did not produce overflow results that matched with larger events and CSO quantities reported in the past. As such, the current model calibration will not be an accurate predictor of future events and thus not a useful tool in CSO mitigation that will produce both reliable results and engineering recommendations that are cost effective. SWMM needs to be calibrated and verified for larger storm events if it is to be trusted in predicting overflows for large design storms and for predicting the reduction in overflows for various projects the City may implement.”

3. PERMIT MODIFICATIONS

The Department concurs with the permittee that the date for submission of an updated CSO Master Plan should be moved to December 31, 2007 to September 30, 2008 and re-authorizing discharges from CSO #004 (Long Creek) to protect public health by eliminating sanitary sewers overflows (SSOs) in this segment of the collection system. As a result;

- a. This permitting action is granting the permittee's requested to change the date for the submission of an updated CSO Master Plan in Special Condition L(4) of the 12/22/06 permit modification from December 31, 2007 to September 30, 2008.
- b. Modifying Special Condition L(1) of the 12/22/06 permit modification by authorizing discharge(s) from CSO Outfall #004 (Long Creek).

4. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

The Department acknowledges that elimination of the CSO's in the collection system and the secondary bypass (primary treated only) of sanitary waste water are costly long term projects. As the City's sewer collection system is upgraded and maintained in accordance with the most current abatement schedule in the City's CSO Master Plan and Nine Minimum Controls, there should be reductions in the frequency and volume of CSO activities and in the waste water receiving primary treatment only at the treatment plant over time. The Department expects these reductions to show an improvement in the ambient water quality of the Fore River and other receiving waters impacted by CSO discharges. A more in-depth review of the water quality and impairment issue for the Fore River estuary is scheduled for calendar year 2012 when a total maximum daily load (TMDL) is scheduled to be performed by the Department. Based on information to date, the Department of Environmental Protection has determined the existing water uses will be maintained and protected provided the permittee complies with the terms and condition established herein and the 4/23/04 MEPDES permit and 12/22/06 permit modification.

5. PUBLIC COMMENTS

Public notice of this application was made in the Portland Press Herald newspaper on or about December 19, 2007. The Department receives public comments on an application until the date a final agency action is taken on that application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to Chapter 522 of the Department's rules.

6. DEPARTMENT CONTACTS

Additional information concerning this permitting action may be obtained from and written comments should be sent to:

Gregg Wood
Division of Water Quality Management
Bureau of Land and Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017

Telephone: (207) 287-7693

7. RESPONSE TO COMMENTS

During the period of January 9, 2008, through the issuance date of this permit modification the Department solicited comments on the proposed draft permit/license to be issued for the discharge(s) from the South Portland facility. The Department received comments electronically on January 23, 2008 from the Conservation Law Foundation (CLF). The Department has prepared a response to CLF's comments as follows:

Comment: CLF wrote "*In reading through the Jan. 9 draft CSO permit modification for South Portland, it is unclear to me how the department reaches the conclusion that reopening CSO #4 in Long Creek will "by itself or in combination with other discharges not lower the quality of any classified body of water below such classification."*

As we all know, Long Creek is in non-attainment for multiple criteria. The draft permit and fact sheet do not explain the basis for the modification (e.g. the "modification requested" section on page 2 of the fact sheet discusses only the rationale for delaying the master plan update). There is also no information regarding the extent of discharges at #4, why it is being reopened, for how long, or analyze the impact this will have on receiving water quality.

Although I have data from John True regarding problems with this outfall in 2006 and portions of 2007, I have no information regarding prospective discharges. This information is critical in order for us to provide comments on the draft permit. Please let me know if this information is available and can be provided with sufficient time for review and comment."

Response: CSO #004 discharges to the tidal portion of Long Creek which is not listed in the Department's State of Maine Department of Environmental Protection, 2006 Integrated Water Quality Monitoring and Assessment Report, [often referred to as the 305(b) Report] as being an impaired waterbody. CSO #004 is being reopened to avoid sanitary sewer discharges from the pump station structure that have occurred a number of times since closure of the CSO in March, 2004. CSO discharges from Outfall #004 tend to fall outside the season in which bacteria standards in the receiving water are applicable (May 15 – September 30). CSO discharges to water bodies are preferred to sanitary sewer overflows since SSOs can result in human health issues in addition to water quality issues.

CSO #004 is being reopened to allow for determination of the frequency, duration and volume of overflow events such that mitigation measures can be evaluated and ultimately, implemented. More accurate data will improve the changes that future projects will mitigate this CSO.

Recommendations regarding mitigation of overflows at CSO #004 will be included in the CSO Master Plan Update to be submitted to the Department on or before September 30, 2008.