STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

ANGUS S. KING, JR.
GOVERNOR

MARTHA KIRKPATRICK
COMMISSIONER

RC1N 10/01/01 – 07/05/05 10.18.01
FAC1
FAC2
FACA
FACO
PTRK 10.18.01

P1099 8/16/01
P2099 8/13/01
P4099 10/2/01
P5099 7/5/05
P6099 10/01/01

October 1, 2001

Randy Dunbar
Town of Southwest Harbor
P.O. Box 745
Southwest Harbor, ME 04679

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0100641
Maine Waste Discharge License (WDL) Application #W002676-5L-D-M
Final Permit/License Modification

Dear Mr. Dunbar:

Enclosed please find a copy of your **final** MEPDES permit and Maine WDL modification which was approved by the Department of Environmental Protection. This permit/license for your facility, supersedes or replaces National Pollutant Discharge Elimination System (NPDES) permit #ME0100641, last issued to your facility by the Environmental Protection Agency (EPA) on September 30, 1999. Please read the permit/license 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 this matter, please feel free to call me at 287-7693.

Sincerely,

Gregg Wood
Division of Water Resource Regulation
Bureau of Land and Water Quality

Enc.

cc: Clarissa Trasko, DEP/EMRO
'id Cochrane, USEPA
nn Nachmann, USEPA

ION 33-0017 L ST.

BANGOR
106 HOGAN ROAD
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769-2094
(207) 764-0477 FAX: (207) 764-1507

.us/dep

STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

DEPARTMENT ORDER

IN THE MATTER OF

TOWN OF SOUTHWEST HARBOR SOUTHWEST HARBOR, HANCOCK COUNTY, MAINE PUBLICLY OWNED TREATMENT WORKS ME0100641 W002676-5L-D-M	**APPROVAL**	MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT AND WASTE DISCHARGE LICENSE **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 (Department) has considered the application of the TOWN OF SOUTHWEST HARBOR (Town), with its supportive data, agency review comments, and other related materials on file, and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

The applicant has applied for modification of Department WDL #W002676-5L-C-R, which was issued on July 5, 2000 and is due to expire on July 5, 2005. The waste discharge license (WDL) approved the discharge of 0.375 million gallons per day (MGD) of secondary treated waste waters to the tidewaters of Southwest Harbor, Class SB, in Southwest Harbor, Maine. The permittee has requested the Department modify the WDL to incorporate the terms and conditions of the Maine Pollutant Discharge Elimination System (MEPDES) permit program.

On January 12, 2001, the Department received authorization from the U.S. Environmental Protection Agency (EPA) to administer the National Pollutant Discharge Elimination System (NPDES) permitting program in Maine. From this point forward, the program will be referenced as the MEPDES permitting program.

PERMIT SUMMARY

This permit carries forward all terms and conditions of the July 5, 2000 WDL. This permitting action establishes a 30-day average removal of 85 percent for biochemical oxygen demand and total suspended solids pursuant to Department rule Chapter 525(3)(III)(a&b)(3). The pH range limit of 6.0-8.5 standard units in the previous licensing action has been modified in this permitting action to 6.0-9.0 standard units based on Department rule Chapter 525 (3)(III).

CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated August 23, 2001 and revised on September 24, 2001, and subject to the Conditions listed below, the Department makes the following CONCLUSIONS:

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 M.R.S.A., 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 not 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 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 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 the opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.

4. The discharge will be subject to effluent limitations that require application of best practicable treatment.

ACTION

THEREFORE, the Department APPROVES the above noted application of the TOWN OF SOUTHWEST HARBOR, to discharge secondary treated waste waters to the tidewaters of Southwest Harbor, Class SB, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable regulations including:

1. "Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits," revised January 16, 2001, copy attached.

2. The attached Special Conditions, including any effluent limitation and monitoring requirements.

3. This permit modification expires on July 5, 2005.

DONE AND DATED AT AUGUSTA, MAINE, THIS 2 DAY OF October, 2001.
10/01/01 → 7/5/05

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
MARTHA KIRKPATRICK, Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: August 6, 2001.

Date of application acceptance: August 13, 2001.

FILED
OCT – 9 2001
BOARD OF ENVIRONMENTAL PROT.
STATE OF MAINE

Date filed with Board of Environmental Protection _____

This order prepared by Gregg Wood, BUREAU OF LAND AND WATER QUALITY
W26765ld 9/25/01

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning the effective date of the permit and lasting through permit expiration, the permittee is authorized to discharge secondary treated waste waters to the tidewaters of Southwest Harbor from **Outfall 001**. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations						Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow *[50050]*	0.375 MGD *[03]*	---	Report (MGD)	---	---	---	Continuous *[CA]*	Recorder *[RC]*
Biochemical Oxygen Demand (BOD_5) *[00310]*	94 #/day *[26]*	141 #/day *[26]*	156 #/day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	2/Week *[03/WK]*	Composite *[24]*
BOD5 % Removal (1) *[81010]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
Total Suspended Solids (TSS) *[00530]*	94 #/day *[26]*	141 #/day *[26]*	156 #/day *[26]*	30 mg/L *[19]*	45 mg/L *[19]*	50 mg/L *[19]*	2/Week *[03/WK]*	Composite *[24]*
TSS % Removal (1) *[81011]*	---	---	---	85% *[23]*	---	---	1/Month *[01/30]*	Calculate *[CA]*
Settleable Solids *[00545]*	---	---	---	---	---	0.3 ml/L *[25]*	1/Day *[01/01]*	Grab *[GR]*
Fecal Coliform Bacteria (2) *[31616]*	---	---	---	15/100 ml *[13]*	---	50/100 ml *[13]*	1/Week *[01/WK]*	Grab *[GR]*
Total Residual Chlorine (2,3) *[50060]*	---	---	---	---	---	0.047 mg/L *[19]*	1/Day *[01/01]*	Grab *[GR]*
pH (Std. Units) *[00400]*	---	---	---	---	---	6.0-9.0 *[12]*	1/Day *[01/01]*	Grab *[GR]*
Copper (Total) (4) *[01042]*	---	---	0.03 #/day *[26]*	---	---	16 ug/L *[28]*	1/Quarter *[01/90]*	Composite *[24]*

The italicized numeric values in brackets in the table above are not limitations but are code numbers used by Department personnel to code Discharge Monitoring Reports (DMR's).

SPECIAL CONDITIONS

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

SURVEILLANCE LEVEL TESTING - **Beginning calendar year 2001 and lasting through calendar year 2003.**

Effluent Characteristic	Discharge Limitations						Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
WET Testing[5]								
A-NOEC								
Mysidopsis bahia [TDA3E]	---	---	---	---	--	Report % [23]	1/Year [01/YR]	Composite [24]
Menidia berrylina [TDA6B]	---	---	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
C-NOEC								
Menidia berrylina [TBP6B]	---	---	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
Arbacia punctulata [TBH3A]	---	---	---	---	---	Report % [23]	1/Year [01/YR]	Composite [24]
Chemical Specific [6] [50008]	---	---	---	---	---	1/0 [94]	1/Year [01/YR]	Grab / Composite [24]

The italicized numeric values in brackets in the table above are not limitations but are code numbers used by Department personnel to code Discharge Monitoring Reports (DMR's).

SPECIAL CONDITIONS

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

SCREENING LEVEL TESTING - **Beginning twelve months prior to the expiration date of this permit.**

Effluent Characteristic	Discharge Limitations						Monitoring Requirements	
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type
WET Testing[5]								
A-NOEC								
Mysidopsis bahia [TDA3E]	---	---	---	---	---	Report % [23]	2/Year [02/YR]	Composite [24]
Menidia berrylina [TDA6B]	---	---	---	---	---	Report % [23]	2/Year [02/YR]	Composite [24]
C-NOEC								
Menidia berrylina [TBP6B]	---	---	---	---	---	Report % [23]	2/Year [02/YR]	Composite [24]
Arbacia punctulata [TBH3A]	---	---	---	---	---	Report % [23]	2/Year [02/YR]	Composite [24]
Chemical Specific [6] [50008]	---	---	---	---	---	1/0 [94]	1/Year [01/YR]	Grab / Composite [24]

The italicized numeric values in brackets in the table above are not limitations but are code numbers used by Department personnel to code Discharge Monitoring Reports (DMR's)

SPECIAL CONDITIONS

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

Footnotes:

1. The treatment facility shall maintain a minimum of 85 percent removal of both total suspended solids and biochemical oxygen demand. The percent removal shall be based on monthly average values. The percent removal shall be waived when the monthly average influent concentration is less than 200 mg/L.

2. Total Residual Chlorine (TRC) shall be tested using Amperometric Titration or the DPD Spectrophotometric Method. The EPA approved methods are found in Standard Methods for the Examination of Water and Waste Water, (most current edition), Method 4500-CL-G or U.S.E.P.A. Manual of Methods of Analysis of Water and Wastes.

   TRC compliance is based on EPA's minimum level (ML) of detection of 0.05 mg/L. All analytical test results shall be reported to the Department including results that are detected below the ML of 0.05 mg/L. For the purposes of reporting TRC test results on the monthly Discharge Monitoring Reports (DMR's) non-detected results or results detected below the ML shall be reported as NODI-B, (*below detection limit*). Detected concentrations at or above the ML of 0.05 mg/L shall be reported at that level in the applicable box on the DMR.

3. Fecal coliform bacteria and total residual chlorine limits and monitoring requirements are in effect between May 15th and September 30th of each year. The monthly average limit of 15/100 ml is a geometric mean. The Department reserves the right to require year round disinfection to protect shellfish harvesting areas and human health based on new information.

4. See Special Condition G.

5. A-NOEC is defined as the acute no observe effect concentration with survival as the endpoint. C-NOEC is defined as the chronic no observed effect concentration with survival, reproduction and growth as the endpoints.

   Beginning calendar year 2001 and lasting through calendar year 2003, the permittee shall conduct surveillance level WET testing (1/Year) in any calendar quarter. Acute tests shall be conducted on the mysid shrimp (*Mysidopsis bahia*) and the inland silverside (*Menidia berrylina*). Chronic tests shall be conducted on the inland silverside (*Menidia berrylina*) and the sea urchin (*Arbacia punctulta*). Results shall be submitted as soon as they become available.

SPECIAL CONDITIONS

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

Footnotes:

Beginning twelve months prior to the expiration date of this permit , the permittee shall conduct screening level WET testing (2/Year) in any two calendar quarters prior to the expiration date of the permit. Acute tests shall be conducted on the mysid shrimp (*Mysidopsis bahia*) and the inland silverside (*Menidia berrylina*). Chronic tests shall be conducted on the inland silverside (*Menidia berrylina*) and the sea urchin (*Arbacia punctulta*). Results shall be submitted as soon as they become available.

The permittee is also required to analyze the effluent for the parameters specified in the analytic chemistry on the form in Attachment A of this permit each and every time a WET test is performed.

Toxicity tests must be conducted by an experienced laboratory approved by the Department. The laboratory must follow procedures as described in the following U.S.E.P.A. methods manuals.

a. Klem, D.J. et al., 1988. Short Term Methods for Estimating the Chronic Toxicity of Effluent and Receiving Water to Marine and Estuarine Organisms, Second Edition, July 1994 (EPA/600/4-91/003).

b. Weber, C.I.(ed) 1990. Methods for Measuring the Acute Toxicity of Effluent and Receiving Waters to Freshwater and Marine Organisms, Fourth Edition, August 1993, (EPA/600/4-90/027F).

6. Priority Pollutants (chemical specific testing under Chapter 530.5) are those listed by the USEPA pursuant to Section 307(a) of the Clean Water Act and published a 40 CFR, Part 122, Appendix D, Tables II and III. **Beginning the effective date of this permit and lasting through permit expiration,** surveillance and screening level chemical specific testing shall be conducted once per calendar year (1/Year). Chemical specific testing shall be conducted on samples collected at the same time as those collected for whole effluent toxicity tests, where applicable. Chemical specific testing shall be conducted using methods that permit detection of a pollutant that achieve minimum reporting levels of detection as specified by the Department. Results shall be reported as soon as they become available. For the purposes of DMR reporting, enter a "0" for no testing done this monitoring period or "1" for yes, testing done this monitoring period.

All mercury sampling shall be conducted in accordance with EPA's "clean sampling techniques" found in EPA Method 1669, Sampling Ambient Water For Trace Metals At EPA Water Quality Criteria Levels. All mercury analysis shall be conducted in accordance with EPA Method 1631, Determination of Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Fluorescence Spectrometry.

SPECIAL CONDITIONS

B. NARRATIVE EFFLUENT LIMITATIONS

1. The effluent shall not contain a visible oil sheen, foam or floating solids at any time.

2. The effluent shall not contain materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the usages designated by the classification of the receiving waters.

3. The discharge shall not cause visible discoloration or turbidity in the receiving waters which would impair the usages designated by the classification of the receiving waters.

4. 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.

C. DISINFECTION

Disinfection shall be used to reduce the concentration of bacteria to or below the level specified in the "Effluent Limitations and Monitoring Requirements" section of this permit. If chlorination is used as the means of disinfection, an approved chlorine detention must be utilized. The total residual chlorine in the effluent shall at no time cause any demonstrable harm to aquatic life in the receiving waters. The final effluent concentration of total residual chlorine, prior to dechlorination if present, must at all times be maintained at a concentration greater than test method detection limits in order to provide effective reduction of bacteria to levels below those specified in Special Condition A, "Effluent Limitations and Monitoring Requirements," above.

D. TREATMENT PLANT OPERATOR

The treatment facility must be operated by a person holding a **Grade II** certificate, pursuant to Title 32 M.R.S.A., Section 4171 et Seq. All proposed contracts for facility operation by any person must be approved by the Department before the permittee may engage the services of the contract operator.

E. MONITORING AND REPORTING

The results of the monitoring requirements shall be reported in forms approved by the Department in the units specified at a frequency of once **monthly** in accordance with the attached Standard Conditions and directed to:

Department of Environmental Protection
Bureau of Land and Water Quality
106 Hogan Road
Bangor, Maine 04401

SPECIAL CONDITIONS

F. RE-OPENER CLAUSE

Upon evaluation of the tests results in Special Conditions A of this permitting action, new site specific information, or any other pertinent test results or information obtained during the term of this permit, the Department may, at anytime and with notice to the permittee, modify this permit to: (1) include effluent limits necessary to control specific pollutants or whole effluent toxicity where there is a reasonable potential that the effluent may cause water quality criteria to be exceeded: (2) require additional monitoring if results on file are inconclusive; or (3) change monitoring requirements or limitations based on new information.

G. WATER FILTRATION SYSTEM UPDATES

This permitting action requires Southwest Harbor to monitor copper on a once per quarter basis as a result of past exceedences of acute AWQC for copper due in part to elevated concentrations of copper in the drinking water supply. Therefore, each and every time the permittee samples, analyzes and reports copper values to the Department to comply with Special Condition A of this permit, the permittee shall also provide the Department with a written update on the performance of the water filtration system. The update shall include, but not be limited to, items such as operational constraints, malfunctions (type and down-time), maintenance activities, etc.

H. NOTIFICATION REQUIREMENT

In accordance with Standard Condition D, the permittee shall notify the Department of the following:

1. Any introduction of pollutants into the waste water collection and treatment system from an indirect discharger in a primary industrial category discharging process waste water; and

2. Any substantial change in the volume or character of pollutants being introduced into the waste water collection and treatment system.

3. For the purposes of this section, adequate notice shall include information on:

   a. The quality and quantity of waste water introduced to the waste water collection and treatment system; and

   b. Any anticipated impact of the change in the quality or quantity of the waste water to be discharged from the treatment system.

SPECIAL CONDITIONS

I. LIMITATIONS FOR INDUSTRIAL USERS

Pollutants introduced into the waste water collection and treatment system by a non-domestic source (user) shall not pass through or interfere with the operation of the treatment system.

J. UNAUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit and only from Outfall 001. Discharges of waste water from any other point source are not authorized under this permit, but shall be reported in accordance with Standard Condition B(5) (Bypass) of this permit.

K. EMERGENCY POWER

Pursuant to Standard Condition E(1)(a) of this permit, **within thirty days after the effective date of this permit**, the permittee shall notify the Department of facilities and plans to be used in the event the primary source of power to its waste water pumping and treatment facilities fails.

ATTACHMENT A

MARINE WHOLE EFFLUENT TOXICITY (WET) TEST REPORT

Facility _____ DEP License No _____ NPDES permit No _____

Contact person _____ Telephone No _____

Date initially sampled _____ (mm/dd/yy) Date tested _____ (mm/dd/yy) Chlorinated? _____

Test type screening _____ surveillance _____ Dechlorinated? _____

Results % effluent

Test required by: DEP/EPA

	Mysid shrimp	sea urchin	silverside
LC50			
A-NOEL			
C-NOEL			

Receiving Water Concentration

A-NOEL	
C-NOEL	

Data summary

	Mysid shrimp		sea urchin		silver side
	% survival	% fertilized	% survival		final wt (mg)
QC standard	A>90	>70	A>90	C>80	>0.50
lab control					
receiving water contrl					
conc. 1 (%)					
conc. 2 (%)					
conc. 3 (%)					
conc. 4 (%)					
conc. 5 (%)					
conc. 6 (%)					
stat test used					

place * next to values statistically different from controls

Reference toxicant

	Mysid shrimp		silver side	
	LC50/A-NOEL	C-NOEL	LC50/A-NOEL	C-NOEL
toxicant /date				
limits (mg/l)				
results (mg/l)				

Salinity Adjustment

brine	
sea salt	
other	

Comments _____

Laboratory Conducting Tests. To the best of my knowledge this information is true, accurate, and complete

signature _____ company _____

printed name _____ address _____

tel. no. _____

Report analytical chemistry on reverse side.

ANALYTICAL CHEMISTRY RESULTS
MARINE WATERS

Date collected _____ mm/dd/yy

Date analyzed _____ mm/dd/yy

Lab ID No. _____

Analyte	Report Units	Results receiving water	Results effluent	Detection level	Method
Ammonia nitrogen	µg/L			µg/L	
Salinity	ppt			ppt	
Total residual oxidants	mg/L			mg/L	
Total organic carbon	mg/L			mg/L	
Total solids	mg/L			mg/L	
Total suspended solids	mg/L			mg/L	
Total aluminum	µg/L			µg/L	
Total cadmium	µg/L			µg/L	
Total chromium	µg/L			µg/L	
Total copper	µg/L			µg/L	
Total lead	µg/L			µg/L	
Total nickel	µg/L			µg/L	
Total zinc	µg/L			µg/L	
other (pH)	S.U.			S.U.	
other ( )					

Comments

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Laboratory conducting test. To the best of my knowledge this information is true, accurate, and complete

signature _____ lab name _____

printed name _____ address _____

tel. no. _____

MAINE POLLUTANT DISCHARGE ELIMINTATION SYSTEM PERMIT
AND
MAINE WASTE DISCHARGE LICENSE

FACT SHEET

Date: **August 23, 2001**
Revised: **September 24, 2001**

PERMIT NUMBER: **ME0100641**
LICENSE NUMBER: **W002676-5L-D-M**

NAME AND ADDRESS OF APPLICANT:

TOWN OF SOUTHWEST HARBOR
Publicly Owned Treatment Works
P.O. Box 745
Southwest Harbor, Maine 04679

COUNTY: **Hancock County**

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

Town of Southwest Harbor
5 Apple Lane
Southwest Harbor, Maine 04679

RECEIVING WATER/CLASSIFICATION: **Tidewaters of Southwest harbor/Class SB**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Mr. Wallace Gilley**
(207) 244-7919

1. APPLICATION SUMMARY

a. Application: The applicant has applied for modification of Department Waste Discharge License #W002676-5L-C-R, which was issued on July 5, 2000 and is due to expire on July 5, 2005. The waste discharge license (WDL) approved the discharge of 0.375 million gallons per day (MGD) of secondary treated waste waters to the tidewaters of Southwest Harbor, Class SB, in Southwest Harbor, Maine. The permittee has requested the Department modify the WDL to incorporate the terms and conditions of the Maine Pollutant Discharge Elimination System (MEPDES) Program.

1. APPLICATION SUMMARY (cont'd)

b. History: The most recent licensing/permitting actions include the following:

June 8, 1994 – The Department issued WDL #002676 to the Town of Southwest Harbor.

January 26, 1999 – The Department received the Town's application for the renewal of the waste discharge license.

September 30, 1999 – The U.S. Environmental Protection Agency (EPA) issued National Pollutant Discharge Elimination System (NPDES) permit #ME0100641 to the Town of Southwest Harbor.

January 12, 2001 – The Department received authorization from the EPA to administer the NPDES permitting program in Maine. From this point forward, the program will be referenced as the MEPDES permitting program. Upon issuance of a final MEPDES permit, NPDES permit #ME0100641 last issued by the EPA on September 30, 1999, will be superseded. Once superseded, all terms and conditions of the NPDES become null and void.

August 6, 2001 - The Town of Southwest Harbor submitted an application to the Department to modify the current license (#W002676-5L-C-R) to incorporate the terms and conditions of the MEPDES permit program.

c. Source Description: The Town's waste water treatment facility engages in the collection and treatment of municipal sanitary waste waters. The Town has indicated the collection system is a separated system with no combined sewer overflow (CSO) points. The facility does not receive more than ten (10) percent of its flow from an industrial source and is not authorized to receive septage.

d. Waste Water Treatment: The Town's waste water treatment provides a secondary level of treatment via a comminutor, two aeration basins, two rectangular clarifiers and a chlorine contact chamber with dechlorination capabilities. The effluent from a facility is discharged to Southwest Harbor through a 16 inch diameter concrete pipe identified as Outfall 001. The sludge is not dewatered on site. It is pumped into a truck and taken to the Bar Harbor waste water treatment plant where it is dewatered and composted.

2. CONDITIONS OF PERMITS

Maine law, 38 M.R.S.A. Section 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require application of best practicable treatment, be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. In addition, 38 M.R.S.A., Section 420, and Department Regulation Chapter 530.5, *Surface Water Toxics Control Program* requires the regulation of toxic substances at the levels set forth for Federal Water Quality Criteria as published by the U.S. Environmental Protection Agency pursuant to the Clean Water Act. The effluent limitations in this license should be equally or more stringent than the limits in the effective NPDES permit.

3. RECEIVING WATER QUALITY STANDARDS

Maine Law, 38 M.R.S.A., Section 469 classifies the tidewaters of Southwest Harbor at the point of discharge as a Class SB waterway. Maine Law, 38 M.R.S.A., Section 465-B(2) establishes the classification standards for Class SB waters.

4. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

The 1998 Water Quality Assessment (305b) report published by the Department indicates that shellfish harvesting area #43 (Southwest Harbor) is closed to the harvesting of shellfish. The State's Department of Marine Resources traditionally closes shellfish harvesting areas if there are known sources of discharges with unacceptable bacteria levels (instream thresholds established in the National Shellfish Sanitation Program) or keep areas closed due to lack of updated information. In addition, a small area is closed in the immediate vicinity of all waste water treatment outfall pipes in the unlikely event of a failure in the system for the treatment plant. The Department of Marine Resources does not have sufficient water quality data at this time to open Area #43.

5. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

This permitting action is carrying forward the monthly average and daily maximum limitations for mass and or concentration limits for flow, biochemical oxygen demand (BOD), total suspended solids (TSS), settleable solids and total residual chlorine from the previous licensing action. This permitting action is establishing a new pH range limitation of 6.0 –9.0 standard units that is a technology based (best practicable treatment) limit pursuant to Department rule Chapter 525(3)(III)(c). This permitting action also establishes a requirement of 85% removal for BOD and TSS pursuant to Department rule Chapter 525(3)(III)(a&b)(3).

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

Whole Effluent Toxicity (WET) & Chemical Specific Testing: Toxicity monitoring as required by Department Regulation Chapter 530.5 (effective date 10/12/94) is included to fully characterize the effluent. The monitoring schedule includes consideration of results currently on file, the nature of the waste water, existing treatment and receiving water characteristics. The Department issued a Fact Sheet on 2/1/95 that outlined Southwest Harbor's WET and chemical specific testing requirements under the Chapter 530.5 regulation. The regulation placed the Southwest Harbor facility in the high frequency category for WET testing as a result of having a dilution factor of less than 20:1 and in the low frequency testing category for chemical specific testing as the facility does not meet the regulation's criteria for the high or medium frequency categories. However, the Department re-evaluated the chronic dilution factor in November of 1996 and determined the chronic dilution factor is 30:1. As a result, the Southwest Harbor facility has been re-categorized as medium frequency category facility for WET testing.

An August 21, 2001, review of Southwest Harbor's most recent 60 months of data indicates that they have fulfilled the testing requirements to date. See Attachment A of this Fact Sheet for the WET test results on file at the Department. The evaluation was conducted in accordance with the statistical approach outlined in EPA's March 1991, *Technical Support Document (TSD) for Water Quality Based Toxics Control*, Chapter 3.3.2 and Maine Department of Environmental Protection Guidance, July 1998, entitled *Toxicity Program Implementation Protocols.* **The results of the 8/21/01 WET evaluation indicates that the discharge does not exceed or have a reasonable potential to exceed critical acute or chronic ambient water quality thresholds for any of the WET species tested to date.** Therefore, this permitting action is establishing a surveillance level of testing of 1/Year. Beginning twelve months prior to the expiration date of the permit, the permittee is required to revert back to a screening level of testing of 2/Year.

As for chemical specific testing, the 8/21/01, statistical evaluation indicates that the discharge from the Southwest Harbor facility has several data points for copper of that exceed acute ambient water quality criteria (AWQC). See Attachment B of this Fact Sheet for the test dates and results evaluated. As a result, this permitting action is carrying forward the daily maximum mass and concentration limits for copper of 0.03 lbs/day and 16 ug/L respectively, from the previous licensing action. See WDL #W002676-5L-C-R dated July 5, 2000 for a discussion on the derivation of the limitations.

Department rule Chapter 530.5 §C(3) states that if data indicates that a discharge is causing an exceedence of applicable AWQC, then:"(1) the Department must notify the permittee of the exceedence; (2) the permittee must submit a toxicity reduction evaluation (TRE) plan for review and approval within 30 days of receipt of notice and implement the TRE after Department approval; (3) the Department must modify the waste discharge permit to specify effluent limits and monitoring requirements necessary to control the level of pollutant and meet receiving water classification standards within 180 days of the Department's approval of the TRE.

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

The Southwest Harbor Water District installed a new water filtration system in 1998. Since the installation of this system the data points for copper have dropped dramatically. Even though the copper numbers have decreased, the most recent results indicate the discharge continues to exceed the acute AWQC and has a reasonable potential to exceed chronic AWQC for copper. A possible explanation may be that the new filtration system is not currently running at its optimum performance level and that additional time may be needed for the system to reach equilibrium. The Department has also made a best professional judgement that Southwest Harbor has initiated appropriate measures to correct the copper problem and has fulfilled a requirement for a TRE. However, Southwest Harbor must continue fine-tuning the water drinking plant to reduce copper concentrations being discharged and continue to up-date the Department as to the status. See Special Condition G of this permitting action. Once the exceedence and reasonable potential to exceed AWQC is no longer applicable, pursuant to the Department's protocol E(1)(greater than 60 months) found in Maine Department of Environmental Protection Guidance, July 1998, entitled *Toxicity Program Implementation Protocols*, Southwest Harbor will be eligible to request a permit modification pursuant to Special Condition F, *Re-Opener Clause*, to remove the limitations and or monitoring requirements.

As for the remaining elements/compounds on the Department chemical specific list, there are no exceedences or reasonable potential to exceed AWQC. Therefore, beginning the effective date of the permit and lasting through permit expiration, this permitting action is establishing a surveillance level of testing of 1/Year (any calendar quarter) for chemical specific testing. It is noted that for facilities in the low frequency category for chemical specific testing, surveillance level and screening level testing are both at a frequency of 1/Year.

6. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

As permitted, the Department has determined the existing water uses will be maintained and protected and the discharges will not cause or contribute to the failure of the waterbody to meet standards for Class SB classification.

7. PUBLIC COMMENTS

Public notice of this application was made in the Bar Harbor Times newspaper on or about August 13, 2001. 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.

8. DEPARTMENT CONTACTS

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

Gregg Wood
Division of Water Resource Regulation
Bureau of Land and Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 287-3901

9. RESPONSE TO COMMENTS

During the period of August 23, 2001 through September 24, 2001, the Department solicited comments on the proposed draft Maine Pollutant Discharge Elimination System permit to be issued for the discharge from the Southwest Harbor waste water treatment facility. The Department did not receive any comments that resulted in any substantive revisions to terms and conditions of the permit modification. Therefore, no Response To Comments has been prepared.