



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE  
GOVERNOR

JAMES P. BROOKS  
ACTING COMMISSIONER

To: Board of Environmental Protection

From: Phil Garwood, Division of Water Quality Management, BLWQ

Date: June 16, 2011

Re: Administrative Consent Agreement – Portland Water District – East End Facility

\*\*\*\*\*

**Statutory References:** Title 38, section 414(5) states that it is illegal to violate the terms and conditions of waste discharge licenses issued by the Department of Environmental Protection.

**Location:** Portland, Maine

**Description:** Portland Water District (PWD) has four waste discharge licenses from the Department for the discharge of treated domestic waste water. This action was taken under the license for the East End Wastewater Treatment Facility serving the City of Portland. This facility is designed for a monthly average flow of 19.8 million gallons per day (mgd), but due to a combined sewer system, receives much higher flows during wet weather and spring snowmelt. The facility is required to treat up to 36.8 mgd through its secondary treatment facilities, with flows above that amount and up to 80 mgd receiving primary treatment and disinfection. PWD also is licensed to discharge untreated waste water during periods of excessive flow from 22 Combined Sewer Overflow structures.

**Environmental Significance:** Since the last consent agreement in 2004, PWD accumulated a substantial number of violations, largely due to excessive solids levels in its secondary system. The solids levels resulted in occasional BOD and TSS violations, as well as continual difficulties in meeting bacteria limits in both secondary and primary disinfection. PWD has already reduced its solids inventory substantially, and is in the process of installing new rotary sludge dewatering presses and new baffles in its aeration basins. Both of these ongoing upgrades will improve PWDs ability to control its solids inventory. Within the past 6 months, PWD has reduced its solids inventory substantially, and has at the same time, dramatically reduced the frequency of violations. The monetary penalty of \$22,200 specified in the agreement has been paid.

**Department Recommendation:** Staff recommends approval of the Agreement as presented.

AUGUSTA  
17 STATE HOUSE STATION  
AUGUSTA, MAINE 04333-0017  
(207) 287-7688 FAX: (207) 287-7826  
RAY BLDG., HOSPITAL ST.

BANGOR  
106 HOGAN ROAD, SUITE 6  
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 04679-2094  
(207) 764-0477 FAX: (207) 760-3143



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

JAMES BROOKS
ACTING COMMISSIONER

IN THE MATTER OF:

PORTLAND WATER DISTRICT ) ADMINISTRATIVE CONSENT
PORTLAND, CUMBERLAND COUNTY, MAINE ) AGREEMENT
PROTECTION AND IMPROVEMENT )
OF WATERS ) (38 M.R.S.A. § 347-A)
EIS# 2011-002-W )

This Agreement, by and among Portland Water District (PWD), the Maine Department of Environmental Protection ("Department"), and the State of Maine Office of the Attorney General ("AG") is entered into pursuant to the laws concerning the Department's Organization and Powers, 38 M.R.S.A. § 347-A(1).

THE PARTIES AGREE AS FOLLOWS:

- 1. PWD is a quasi-municipal corporation that is organized and exists under the laws of the State of Maine. PWD operates four public wastewater treatment systems, the largest of which, Portland's East End Wastewater Treatment Facility ("East End WWTF"), is the main subject of this Agreement. PWD also operates portions of the sewer system serving the City of Portland, including 22 combined sewer overflow (CSO) structures, several of which are also covered by this Agreement.
2. On March 6, 2003, PWD was issued combined Waste Discharge License number W-002671-5M-E-M and Maine Discharge Elimination System (MEPDES) Permit number ME0102075, hereinafter referred to as the PWD WDL. The PWD WDL authorized the discharge of treated domestic waste water from the East End WWTF to the tidewaters of Casco Bay, Class SC and untreated combined sewer overflows (CSOs) from 22 CSO structures to the tidewaters of the Fore River, Back Cove and Casco Bay, subject to a series of standard and special conditions. The East End WWTF is required to provide secondary treatment and disinfection up to 36.8 million gallons per day ("mgd"). Flows above 36.8 mgd up to approximately 80 mgd during high flow events must receive primary treatment and disinfection prior to being mixed with the secondary system effluent for discharge to the receiving water.

The PWD WDL was modified and renewed as ME0102075/W-002671-5M-F-M by the Department on January 10, 2006. That renewal eliminated the numeric monthly average flow limit of 19.8 mgd for outfall 001A, while retaining the requirement to report the monthly average flow amount. The frequency requirements for reporting of biochemical oxygen demand ("BOD") and total suspended solids ("TSS") were changed from 1 per day to 5 per week. On September 5, 2008, the Department issued a minor revision (W-002671-5M-G-M/ME0102075) to the PWD WDL which eliminated the requirement to

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD, SUITE 6
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 04679-2094
(207) 764-0477 FAX: (207) 760-3143

IN THE MATTER OF:

PORTLAND WATER DISTRICT	2)	ADMINISTRATIVE CONSENT
PORTLAND, CUMBERLAND COUNTY, MAINE	)	AGREEMENT
PROTECTION AND IMPROVEMENT OF WATERS	)	
EIS# 2011-002-W	)	(38 M.R.S.A. § 347-A)

sample and test the secondary effluent for fecal coliform bacteria during each bypass event. Regularly scheduled secondary effluent testing for fecal coliform was not affected by this modification. PWD filed an application for renewal, which was accepted as complete for processing by the Department on December 16, 2010. Based on the filing of a timely application for renewal, the limits and conditions of the 2006 Permit remain in force until the Department makes a decision on the application for renewal.

3. On November 18, 2004, the Department and the Attorney General entered into an Administrative Consent Agreement that resolved violations of the PWD WDL that occurred between January 1, 1999 and July 19, 2004. The November 2004 Consent Agreement included requirements to conduct an operational evaluation of the East End WWTF and to implement operational and infrastructural improvements as determined by the evaluation. The requirements of the 2004 CA were satisfied as affirmed by a June 8, 2007 letter from the Department.
  
4. The PWD WDL limits the discharge of Biochemical Oxygen Demand ("BOD") to a weekly average mass of 7,431 pounds per day ("lb/day"), a weekly average concentration of 45 milligrams per liter ("mg/L") and a daily maximum concentration of 50 mg/L from outfall 001A. During the following months, PWD discharged BOD in excess of its license limits and in violation of 38 M.R.S.A. § 414(5) as indicated:

Date	Weekly Average Mass (lb/day)	Weekly Average Concentration (mg/L)	Daily Maximum Concentration (mg/L)
License Limit	7,431 lb/day	45 mg/L	50 mg/L
9/14/2004			71
3/8/2005			67
5/6/2005			84
8/27/2005			89
11/15/2007			51
11/16/2007			59
1/22/2009			54
1/20/2010			80
1/21/2010			132
1/22/2010			55
1/23/2010		68	
2/24/2010			69
2/27/2010	9,108		

IN THE MATTER OF:

PORTLAND WATER DISTRICT  
 PORTLAND, CUMBERLAND COUNTY, MAINE  
 PROTECTION AND IMPROVEMENT OF WATERS  
 EIS# 2011-002-W

3)  
 )  
 )  
 )

ADMINISTRATIVE CONSENT  
 AGREEMENT

(38 M.R.S.A. § 347-A)

5. The PWD WDL limits the discharge of Total Suspended Solids ("TSS") to a weekly average mass of 7,431 pounds per day ("lb/day"), a weekly average concentration of 45 milligrams per liter ("mg/L") and a daily maximum concentration of 50 mg/L from outfall 001A. During the following months, PWD discharged TSS in excess of its license limits and in violation of 38 M.R.S.A. § 414(5) as indicated:

Date	Weekly Average Mass (lb/day)	Weekly Average Concentration (mg/L)	Daily Maximum Concentration (mg/L)
License Limit	7,431 lb/day	45 mg/L	50 mg/L
9/14/2004			259
9/18/2004		47	
11/25/2005			55
12/26/2006			73
2/1/2007			86
3/12/2007			59
3/13/2007			65
3/14/2007			60
3/17/2007	10,442	49	
4/12/2007			51
4/13/2007	9,030		
7/4/2007			58
11/15/2007			52
2/13/2008			53
3/19/2008			51
4/9/2008			51
1/22/2009			58
2/5/2009			57
2/12/2009			68
2/24/2010			75
2/27/2010	9,093		
3/14/2010			56
8/25/2010			88
2/28/2011			86

IN THE MATTER OF:

PORTLAND WATER DISTRICT  
 PORTLAND, CUMBERLAND COUNTY, MAINE  
 PROTECTION AND IMPROVEMENT OF WATERS  
 EIS# 2011-002-W

4)  
 )  
 )  
 )

ADMINISTRATIVE CONSENT  
 AGREEMENT

(38 M.R.S.A. § 347-A)

6. The PWD WDL limits the discharge of Settleable Solids (“SS”) to a daily maximum concentration of 0.3 mg/L from outfall 001A. During the following months, PWD discharged SS in excess of its license limits and in violation of 38 M.R.S.A. § 414(5) as indicated:

Date	Daily Maximum Concentration (mg/L)
License Limit	0.3 mg/L
10/8/2005	2.2
5/11/2006	2
5/12/2006	1.6
10/26/2008	23
2/19/2009	9
6/12/2009	38
6/14/2009	0.5
7/18/2009	2.2
7/24/2009	15
8/1/2009	0.7
2/25/2010	10
3/14/2010	75
3/15/2010	3
3/23/2010	100
3/26/2010	31
5/8/2010	510
5/19/2010	150
6/28/2010	1
7/14/2010	80
7/24/2010	0.5
7/25/2010	35

7. The PWD WDL limits the discharge of Total Residual Chlorine (“TRC”) to a daily maximum concentration of 0.27 mg/L from outfall 001A. During the following months, PWD discharged TRC in excess of its license limits and in violation of 38 M.R.S.A. § 414(5) as indicated:

IN THE MATTER OF:

PORTLAND WATER DISTRICT  
 PORTLAND, CUMBERLAND COUNTY, MAINE  
 PROTECTION AND IMPROVEMENT OF WATERS  
 EIS# 2011-002-W

5)  
 )  
 )  
 )

ADMINISTRATIVE CONSENT  
 AGREEMENT

(38 M.R.S.A. § 347-A)

Date	Daily Maximum Concentration (mg/L)
License Limit	0.27 mg/L
4/2/2005	1.23
4/20/2005	1.79
8/31/2005	0.47
9/15/2005	1.01

8. The PWD WDL limits the discharge of Total Residual Chlorine (“TRC”) to a daily maximum concentration of 0.3 mg/L from outfall 001B. During the following months, PWD discharged TRC in excess of its license limits and in violation of 38 M.R.S.A. § 414(5) as indicated:

Date	Daily Maximum Concentration (mg/L)
License Limit	0.3 mg/L
2/15/2005	7.92
4/2/2005	0.62
4/20/2005	2.69
1/15/2006	0.68
1/31/2006	0.85
4/4/2006	2.2
4/5/2006	3.68
6/7/2006	0.42
4/30/2007	2.85
3/9/2009	2.1
6/23/2009	2.15

9. The PWD WDL limits the discharge of Fecal Coliform Bacteria (“FC”) to a daily maximum of 50 colony forming units per 100mL (“cfu/100mL”) from outfall 001A. During the following months, PWD discharged FC in excess of its license limits and in violation of 38 M.R.S.A. § 414(5) as indicated:

IN THE MATTER OF:

PORTLAND WATER DISTRICT  
 PORTLAND, CUMBERLAND COUNTY, MAINE  
 PROTECTION AND IMPROVEMENT OF WATERS  
 EIS# 2011-002-W

6)  
 )  
 )  
 )

ADMINISTRATIVE CONSENT  
 AGREEMENT

(38 M.R.S.A. § 347-A)

Date	Daily Maximum Concentration (mg/L)
License Limit	50 cfu/100mL
8/9/2004	100
8/27/2004	250
9/16/2004	60
9/23/2004	56
9/9/2005	158
9/19/2006	730
3/28/2007	67
3/29/2007	70
3/30/2007	57
8/6/2007	73
10/9/2007	60
10/19/2007	113
10/26/2007	336
6/19/2008	1200
7/24/2008	52
11/25/2008	76
9/29/2009	116
10/13/2009	106
1/25/2010	52
8/25/2010	1800
9/6/2010	600
10/1/2010	90
10/15/2010	93
11/18/2010	96
1/15/2011	400

10. The PWD WDL limits the discharge of Fecal Coliform Bacteria ("FC") to a daily maximum of 50 cfu/100mL from outfall 001A for samples taken specifically during bypass events pursuant to Special Condition A, footnote 12. During the following months, PWD discharged FC in excess of its license limits and in violation of 38 M.R.S.A. § 414(5) as indicated:

IN THE MATTER OF:

PORTLAND WATER DISTRICT )  
 PORTLAND, CUMBERLAND COUNTY, MAINE )  
 PROTECTION AND IMPROVEMENT OF WATERS )  
 EIS# 2011-002-W )

ADMINISTRATIVE CONSENT )  
 AGREEMENT )

(38 M.R.S.A. § 347-A)

Date	Daily Maximum Concentration (mg/L)
License Limit	50 cfu/100mL
2/15/2005	1700
3/8/2005	1200
8/31/2005	92
9/15/2005	118
9/17/2005	144
10/8/2005	105
11/23/2005	68
3/31/2006	208
5/1/2006	111
5/9/2006	61
6/1/2006	>6000
6/20/2006	121
7/12/2006	560
9/23/2006	62
3/2/2007	70
3/15/2007	52
3/22/2007	54
8/6/2007	536
8/8/2007	116
8/16/2007	810
9/11/2007	74
9/27/2007	164
10/6/2007	136
10/8/2007	140
11/26/2007	220
3/4/2008	131
7/20/2008	96
7/24/2008	66
7/31/2008	400
8/2/2008	62
8/6/2008	836

11. The PWD WDL limits the discharge of Fecal Coliform Bacteria ("FC") to a daily maximum of 200 cfu/100mL from outfall 001B. During the following months, PWD

IN THE MATTER OF:

PORTLAND WATER DISTRICT  
 PORTLAND, CUMBERLAND COUNTY, MAINE  
 PROTECTION AND IMPROVEMENT OF WATERS  
 EIS# 2011-002-W

8)  
 )  
 )  
 )

ADMINISTRATIVE CONSENT  
 AGREEMENT

(38 M.R.S.A. § 347-A)

discharged FC in excess of its license limits and in violation of 38 M.R.S.A. § 414(5) as indicated:

Date	Daily Maximum Concentration (mg/L)
License Limit	200 cfu/100mL
8/3/2004	1700
8/13/2004	320
8/21/2004	600
11/24/2004	1200
12/23/2004	9200
3/8/2005	3000
4/2/2005	1027
8/29/2005	1200
9/15/2005	623
10/8/2005	220
10/11/2005	800
10/15/2005	238
2/3/2006	500
6/1/2006	1800
7/12/2006	350
8/27/2006	2000
9/19/2006	410
11/2/2006	400
11/13/2006	670
11/14/2006	320
7/19/2007	>1200
5/31/2008	340
8/6/2008	827
8/12/2008	320
9/6/2008	3000
9/26/2008	3600
10/26/2008	270
10/28/2008	330
11/25/2008	>1200
12/11/2008	827
12/12/2008	338

IN THE MATTER OF:

PORTLAND WATER DISTRICT  
 PORTLAND, CUMBERLAND COUNTY, MAINE  
 PROTECTION AND IMPROVEMENT OF WATERS  
 EIS# 2011-002-W

)  
 )  
 )  
 )

ADMINISTRATIVE CONSENT  
 AGREEMENT

(38 M.R.S.A. § 347-A)

2/18/2009	1600
2/19/2009	2200
3/11/2009	3000
4/22/2009	908
5/9/2009	400
5/27/2009	220
6/9/2009	8000
6/11/2009	1100
7/23/2009	330
8/23/2009	590
12/26/2009	280
2/24/2010	1200
2/26/2010	280
3/13/2010	5800
4/16/2010	1200
5/18/2010	370
6/27/2010	2600
7/10/2010	>1200
7/13/2010	>1200

12. The 2003 PWD WDL limited the flow of treated secondary waste water from outfall 001A to a monthly average of 19.8 mgd. During the following months, PWD discharged treated secondary waste water flow in excess of its license limits and in violation of 38 M.R.S.A. § 414(5) as indicated:

Month	Monthly Average (mgd)
License Limit	19.8 mgd
August 2004	22.1
December 2004	23.7
February 2005	20.4
March 2005	23.3
April 2005	27.8
May 2005	25.2
October 2005	23.4
November 2005	23.9
December 2005	22.6

IN THE MATTER OF:

PORTLAND WATER DISTRICT PORTLAND, CUMBERLAND COUNTY, MAINE PROTECTION AND IMPROVEMENT OF WATERS EIS# 2011-002-W	10) ) ) )	ADMINISTRATIVE CONSENT AGREEMENT  (38 M.R.S.A. § 347-A)
--------------------------------------------------------------------------------------------------------------------------	--------------------	------------------------------------------------------------------

13. Special Condition A of the PWD WDL describes the required monitoring and testing frequencies for sampling of secondary-treated effluent discharged through outfall 001A, including flow, pH, BOD, TSS, SS, TRC and FC. On the following dates, PWD failed to conduct the required sampling or testing, in violation of this special condition and 38 M.R.S.A. § 414(5) as indicated:

Date	Incident	Cause
8/12/2004	Failure to test for pH	Operator omission
10/2/2004	Failure to test bypass flow sample for bacteria	Lab not informed sample had been taken
11/16/2005	Failure to sample during bypass event	Operator omission
5/10/2006	Failure to sample during bypass event	Operator omission
10/15/2006	Failure to sample for SS	Operator omission
4/1/2007	Failure to sample for SS	Operator omission
11/24/2008	Failure to conduct effluent sampling	Operator omission
3/9/2009	Failure to sample during bypass event	Operator sampled chlorine contact chamber with no discharge occurring
6/23/9	Failure to sample during bypass event	Operator sampled chlorine contact chamber with no discharge occurring
5/8/2010	Grab samples not taken during bypass event	Operator omission

14. Special Condition G of the PWD WDL requires the submittal of sampling and monitoring results to the Department on monthly reporting forms. BOD test results were not reported to the Department for the following periods, in violation of this special condition and 38 M.R.S.A. § 414(5) as indicated:

Date	Incident	Cause
7/1-12/2006	No BOD results reported	Test results were determined to be invalid
7/14/-20/2006	No BOD results reported	Test results were determined to be invalid
10/25-28/2008	No BOD results reported	Test results were determined to be invalid
11/1-6/2008	No BOD results reported	Test results were determined to be invalid

**IN THE MATTER OF:**

**PORTLAND WATER DISTRICT  
 PORTLAND, CUMBERLAND COUNTY, MAINE  
 PROTECTION AND IMPROVEMENT OF WATERS  
 EIS# 2011-002-W**

11)  
 )  
 )  
 )

**ADMINISTRATIVE CONSENT  
 AGREEMENT**

**(38 M.R.S.A. § 347-A)**

Guidance from the Department was not thorough regarding invalid test results for BOD at the time of these violations. Staff of PWD were instrumental in development of Standard Operating Procedures and guidance now provided by the Department to all waste water treatment operators in the state of Maine.

15. Standard Condition E(1)(a) of the PWD WDL requires that all waste waters receive at least primary treatment and disinfection during power outages, through the use of alternate power sources to run critical equipment. On the following dates, PWD failed to provide disinfection to its wastewater due to failure of the back-up power system to operate, in violation of this standard condition and 38 M.R.S.A. § 414(5) as indicated:

Date	Incident	Cause
6/29/2005	Approximately 2 hr discharge of effluent through outfall 001A without chlorination	The standby generator failed to start during a power outage.
4/20/2006	2.15 hour discharge of effluent through outfall 001A without chlorination	The standby generator failed to start during a power outage.

16. Special Condition A(2) of the PWD WDL requires that all flows receive secondary treatment and disinfection up to an instantaneous flow rate of 25,600 gpm (equivalent to a daily flow of 36.8 mgd). Flows above that rate may be bypassed around the secondary treatment system to the disinfection system prior to discharge. On the following dates, PWD discharged flows receiving primary treatment and disinfection when the flows through the secondary system were less than 25,600 gpm, in violation of this special condition and 38 M.R.S.A. § 414(5) as indicated:

Date	Incident	Cause
9/11/2004	0.56 million gallons bypassed	PLC control of bypass valve did not work properly when gate failed to seat properly
5/18-23/2005	Secondary system limited to 25 mgd flow rate	Secondary clarifier beaching plate fell off into clarifier due to corrosion of incorrect bolts
7/26/2006	Unknown volume bypassed	Improper connections resulted in bypass valve opening without any indication on control panel
7/28/2006	6-8 million gallons bypassed during a period	Bypass gate failed to close and operators did not detect the problem for nearly two

**IN THE MATTER OF:**

**PORTLAND WATER DISTRICT  
 PORTLAND, CUMBERLAND COUNTY, MAINE  
 PROTECTION AND IMPROVEMENT OF WATERS  
 EIS# 2011-002-W**

12) **ADMINISTRATIVE CONSENT  
 ) AGREEMENT  
 )  
 )  
 ) (38 M.R.S.A. § 347-A)**

	of 40.5 hours	days.
9/20/2006	Unknown volume bypassed	Bypass valve failure. New motor and encoder installed
5/9/2007	140,000 gallon bypass during a period of 7 minutes	Operators failed to lock out the bypass system while making modifications to the system
12/13/2009	Unknown volume bypassed	Operator error in resetting SCADA controls after flow splitter repairs

17. Special Condition L(2) of the PWD WDL prohibits discharges from permitted CSO points during dry weather, below the maximum design capacity of the wastewater treatment plant, pumping stations or sewage system, or as the result of mechanical failure, improper design or inadequate operation or maintenance. On the following dates, PWD discharged overflows from its CSOs or sewer system, in violation of this special condition and 38 M.R.S.A. § 414(5) as indicated:

Date	Incident	Cause
6/2/2006	CSO discharge from Northeast Pump Station CSO #20 during wet weather below design flow rate	Bypass system at treatment plant not functioning properly, so flows were throttled to 50 mgd
7/25/2007	Unknown volume SSO at Thompson Point CSO #32	Blockage of sewer with large quantity of paper, apparently from facility that discharges to City of Portland-owned portion of the sewer system
12/7/2007	7000 gal SSO from India Street CSO #23	Regulator partially blocked by bricks and debris coming from City of Portland – owned portion of the sewer system
12/14/2007	>50 gallon SSO from Stroudwater Pumping Station at Blueberry Lane	Station surcharged due to UPS battery failure which shut down the station for 1 hour
12/18/2007	>5000 gallon SSO from India Street CSO #23	Regulator partially blocked by bricks and debris coming from City of Portland – owned portion of the sewer system
12/9/2008	20-200 gallon SSO near Thompson Point CSO #32	Leak developed in ductile iron force main. Repaired next day with stainless repair clamp
5/15/2009	Undetermined volume of SSO from Mackworth	A contractor for the City of Portland sandbagged the orifice plate during job

**IN THE MATTER OF:**

**PORTLAND WATER DISTRICT  
 PORTLAND, CUMBERLAND COUNTY, MAINE  
 PROTECTION AND IMPROVEMENT OF WATERS  
 EIS# 2011-002-W**

13)      **ADMINISTRATIVE CONSENT  
 )                      AGREEMENT  
 )  
 )                      (38 M.R.S.A. § 347-A)**

	Street CSO #10	
10/14/2009	Unknown duration, unknown volume leakage near Thompson Point CSO #32	Leak developed in ductile iron force main. Repaired with stainless repair clamp. Pipeline slated for replacement in 2010
12/23/2009	Unknown duration, unknown volume leakage near Thompson Point CSO #32	Leak developed in ductile iron force main. Repaired with stainless repair clamp. Pipeline slated for replacement in 2010
2/17/2010	Unknown volume SSO from Thompson Point CSO #32	Regulator blocked by debris and stones
6/2/2010	<500 gallon SSO from Thompson Point CSO #32	Orifice plate plugged by debris from Amtrak. City of Portland pretreatment program involved in response
6/5/2010	855,000 gallon CSO discharge from Northeast Pump Station CSO #20	Treatment plant influent screen blinded during high flows and dislodged from track. Flow throttled so screen could be cleaned and reset
9/2/2010	50 gallon SSO from Northeast Pump Station	Leak in 18-inch HDPE pipeline joint
12/4-6/2010	226,000 gallon SSO from the Thompson Point CSO structure	The regulator was blocked by wipes, apparently from Amtrak or the bus station, even though these companies have been informed not to dispose of them into sewer. The overflow alarm failed also.
12/28/2010	9,000 gallon SSO from Thompson Point CSO	Pipe downstream of orifice was blocked by rags.

18. Special Condition E of the PWD WDL prohibits discharges that are not specifically authorized by the license. On February 19, 2009, due to a blockage, an undetermined volume of primary sludge overflowed onto the ground and mixed with the snow being plowed from access roads and pathways. PWD recaptured some, but not all, of this sludge and returned it to the treatment system. The remaining sludge was discharged to waters of the state via overland flow during snowmelt. The discharge of sludge violated this special condition and 38 M.R.S.A. § 414(5).
  
19. On February 16, 2011, the Department issued a Notice of Violation (“NOV”) to PWD for the activities described in paragraphs 4 - 18 of this Agreement, in accordance with 38 M.R.S.A. § 347-A(1)(B). The parties agree that they have been adequately noticed for all respective violations herein.

IN THE MATTER OF:

PORTLAND WATER DISTRICT	14)	ADMINISTRATIVE CONSENT
PORTLAND, CUMBERLAND COUNTY, MAINE	)	AGREEMENT
PROTECTION AND IMPROVEMENT OF WATERS	)	
EIS# 2011-002-W	)	(38 M.R.S.A. § 347-A)

20. By May 2007, PWD completed the corrective actions that were required by the November 2004 Consent Agreement, including installation of valves to allow draining of the primary bypass line after high flow events, replacement of the gas disinfection and dechlorination systems with hypochlorite and bisulfite liquid delivery systems, replacement of the primary clarifier stop gate, upgrades to its bypass control system, sludge press upgrades and reduction of the solids inventory to the range of 80,000 to 100,000 pounds. In its ongoing efforts to improve performance and reduce the number of effluent violations, PWD has undertaken a number of additional operational changes or equipment upgrades. These include: a major cleaning of the chlorine contact basins (70,000 lb solids returned to aeration), established a weekly routine of chlorine contact basin cleaning and bypass pipe flushing, installed a new polymer feed system in the secondary clarifiers, established an operational set point of 7 day sludge residence time to maintain lower solids inventory, and brought in an operational consultant as well as worked with DEP technical assistance staff to develop and implement a variety of operational improvements.
21. Pursuant to 38 M.R.S.A. §§ 341-D(6)(C) and 347-A(1)(A)(1), administrative consent agreements must be approved by the Board of Environmental Protection (“Board”), which is part of the Department.
22. This Agreement shall become effective only if it is approved by the Board and the Office of the Attorney General.
23. To resolve the violations described in Paragraphs 4 through 19 of this Agreement, PWD agrees to:
  - A. Pay a civil monetary penalty to the *Treasurer, State of Maine* in the amount of twenty-two thousand two hundred dollars (\$22,200) immediately upon signing this Agreement.
  - B. Prior to June 1, 2011, submit to the Department for review and approval an updated wet weather management plan.
  - C. Prior to September 15, 2011, complete construction and begin operation of rotary sludge dewatering presses.
  - D. Prior to September 30, 2011, complete installation and place into operation the 9 aeration system process gates that will allow operational staff to balance flows among the aeration system components.

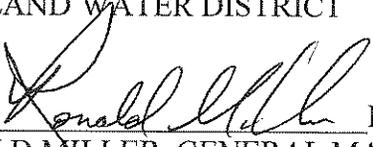
IN THE MATTER OF:

PORTLAND WATER DISTRICT	15)	ADMINISTRATIVE CONSENT
PORTLAND, CUMBERLAND COUNTY, MAINE	)	AGREEMENT
PROTECTION AND IMPROVEMENT OF WATERS	)	
EIS# 2011-002-W	)	(38 M.R.S.A. § 347-A)

- E. Prior to December 31, 2011, submit to the Department for review and approval the report of a performance evaluation of the East End WWTF to include both dry and wet weather operations and equipment. The report shall include plans and a schedule for any necessary improvements indicated by the findings of the evaluation. The plan shall be implemented by PWD in compliance with the approved schedule.
24. The Department and the Office of the Attorney General grant a release of their causes of action against Portland Water District for the specific violation listed in Paragraphs 4-19 of this Agreement on the express condition that all actions listed in Paragraph 23 of this Agreement are completed in accordance with the express terms and conditions of this Agreement. The release shall not become effective until all requirements of this Agreement are satisfied.
25. Non-compliance with this Agreement voids the release set forth in Paragraph 24 of this Agreement and may lead to an enforcement action pursuant to 38 M.R.S.A. §§ 347-A(1)(A), 347-A(5), or 348, as well as pursuit of other remedies.
26. Actions taken pursuant to this Agreement shall be completed in accordance with the requirements of all applicable local, state, and federal laws, rules, laws, and orders including but not limited to licensing requirements.
27. The provisions of this Agreement shall apply to, and be binding on, the parties and their officers, agents, servants, employees, successors, and assigns, and upon those persons in active concert or participation with them who receive actual notice of this Agreement.

IN WITNESS WHEREOF the parties hereto have executed this Agreement consisting of sixteen (16) pages:

PORTLAND WATER DISTRICT

BY:  DATE: 5/2/2011  
RONALD MILLER, GENERAL MANAGER

IN THE MATTER OF:

PORTLAND WATER DISTRICT 16)  
PORTLAND, CUMBERLAND COUNTY, MAINE )  
PROTECTION AND IMPROVEMENT OF WATERS )  
EIS# 2011-002-W )

ADMINISTRATIVE CONSENT  
AGREEMENT

(38 M.R.S.A. § 347-A)

MAINE BOARD OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
SUSAN M. LESSARD, CHAIR

MAINE OFFICE OF THE ATTORNEY GENERAL

BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
JANET M. MCCLINTOCK, ASSISTANT ATTORNEY GENERAL