



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

DEPARTMENT ORDER

IN THE MATTER OF

CITY OF OLD TOWN)	MAINE POLLUTANT DISCHARGE
OLD TOWN, PENOBSCOT COUNTY, MAINE)	ELIMINATION SYSTEM PERMIT
NON-PROCESS (FILTER BACKWASH) WATERS))	AND
ME0037362)	WASTE DISCHARGE LICENSE
W009097-5S-B-R)	RENEWAL
	APPROVAL	

In compliance with the applicable provisions of *Pollution Control*, 38 M.R.S. § 411-424-B, *Water Classification Program* 38 M.R.S. § 464-470 and *Federal Water Pollution Control Act*, Title 33 USC, § 1251, and applicable rules of the Department of Environmental Protection (Department) has considered the application of the CITY OF OLD TOWN (City/permittee) with its supportive data, agency review comments, and other related material on file and FINDS THE FOLLOWING FACTS:

APPLICATION SUMMARY

On October 3, 2017, the Department accepted as complete for processing a complete application from the City for the renewal of combination Maine Pollutant Discharge Elimination System (MEPDES) permit ME0037362 and Maine Waste Discharge License (WDL) W009097-5S-A-N (permit) which was issued by the Department on December 4, 2012 for a five-year term. The 12/4/12 permit authorized the intermittent discharge (every 60 days) of 3,500 gallons of swimming pool filter backwash waters to the Penobscot River, Class B, in Old Town, Maine.

PERMIT SUMMARY

This permitting action is carrying forward the terms and conditions of the previous permit.

CONCLUSIONS

BASED on the findings in the attached **DRAFT** Fact Sheet dated May 15, 2018, 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. §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) 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 water 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 discharge will be subject to effluent limitations that require application of best practicable treatment as defined in 38 M.R.S. § 414-A(1)(D).

ACTION

THEREFORE, the Department APPROVES the above noted renewal application of the CITY OF OLD TOWN to intermittently discharge 3,500 gallons of swimming pool filter backwash waters to the Penobscot River, Class B, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations:

1. *“Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits,”* revised July 1, 2002.
2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
3. This permit becomes effective upon the date of signature below and expires at midnight five (5) years after that date. If a renewal application is timely submitted and accepted as complete for processing prior to the expiration of this permit, the terms and conditions of this permit and all subsequent modifications and minor revisions thereto remain in effect until a final Department decision on the renewal application becomes effective. *Maine Administrative Procedure and Services*, 5 M.R.S. § 10002 and Rules Concerning the *Processing of Applications and Other Administrative Matters*, 06-096 CMR 2(21) (A) (amended October 19, 2015).

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

DONE AND DATED AT AUGUSTA, MAINE, THIS ____ DAY OF _____, 2018.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
Paul Mercer, COMMISSIONER

Date of initial receipt of application: October 3, 2017.

Date of application acceptance October 3, 2017.

Date filed with Board of Environmental Protection _____

This Order prepared by Rod Robert, BUREAU OF WATER QUALITY

SPECIAL CONDITIONS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. The permittee is authorized to discharge non-process wastewaters to the Penobscot River. Such discharges must be limited and monitored by the permittee as specified below:

OUTFALL #001 - Swimming Pool Filter Backwash Waters

Effluent Characteristic	Discharge Limitations				Minimum Monitoring Requirements	
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow [50050]	---	3,500 gpd _[07]	---		1/Quarter [01/90]	Calculate [CA]
Total Suspended Solids (TSS) [00530]	---	Report #/day [26]	---	Report mg/L [19]	1/Quarter [01/90]	Grab [CP]
Total Residual Chlorine [50060]	---	---	---	3.0 mg/L [19]	1/Quarter [01/90]	Grab [GR]
pH (Std. Units) [00400]	---	---	---	6.0-8.5 SU _[12]	1/Quarter [01/90]	Grab [GR]

SPECIAL CONDITIONS

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

Footnotes:

Sampling All effluent monitoring must be conducted at a location following the last treatment unit in the treatment process as to be representative of end-of-pipe effluent characteristics. Sampling and analysis must be conducted in accordance with;

- a) methods approved by 40 Code of Federal Regulations (CFR) Part 136,
- b) alternative methods approved by the Department in accordance with the procedures in 40 CFR Part 136, or
- c) as otherwise specified by the Department. Samples that are sent out for analysis must be analyzed by a laboratory certified by the State of Maine's Department of Health and Human Services. If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report (DMR).

B. NARRATIVE EFFLUENT LIMITATIONS

1. The effluent must not contain a visible oil sheen, foam or floating solids at any time which would impair the usages designated for the classification of the receiving waters.
2. The effluent must not contain materials in concentrations or combinations which are hazardous or toxic to aquatic life, or which would impair the usages designated for the classification of the receiving waters.
3. The discharge must not cause visible discoloration or turbidity in the receiving waters which would impair the usages designated for 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.

SPECIAL CONDITIONS

C. AUTHORIZED DISCHARGES

The permittee is authorized to discharge only in accordance with: 1) the permittee's General Application for Waste Discharge Permit, accepted for processing on October 3, 2017; 2) the terms and conditions of this permit; and 3) only from Outfall #001. Discharges of wastewater from any other point source are not authorized under this permit, and must be reported in accordance with Standard Condition D(f)(1), *Twenty-Four-Hour Reporting*, of this permit.

D. NOTIFICATION REQUIREMENT

In accordance with Standard Condition D, the permittee must notify the Department of any substantial change in the volume or character of pollutants being discharged.

E. MONITORING AND REPORTING

Electronic Reporting

NPDES Electronic Reporting, 40 C.F.R. 127, requires MEPDES permit holders to submit monitoring results obtained during the previous month on an electronic discharge monitoring report to the regulatory agency utilizing the USEPA electronic system.

Electronic DMRs submitted using the USEPA NetDMR system, must be:

1. Submitted by a facility authorized signatory; and
2. Submitted no later than **midnight on the 15th day of the month** following the completed reporting period.

Documentation submitted in support of the electronic DMR may be attached to the electronic DMR. Documentation submitted electronically to the Department in support of the electronic DMR must be submitted no later than midnight on the 15th day of the month following the completed reporting period.

E. MONITORING AND REPORTING (cont'd)

Non-electronic Reporting

If you have received a waiver from the Department concerning the USEPA electronic reporting rule, or are permitted to submit hardcopy DMR's to the Department, then your monitoring results obtained during the previous month must be summarized for each month and reported on separate DMR forms provided by the Department and **postmarked on or before the thirteenth (13th) day of the month or hand-delivered to a Department Regional Office such that the DMR's are received by the Department on or before the fifteenth (15th) day of the month** following the completed reporting period.

A signed copy of the DMR and all other reports required herein must be submitted to the Department assigned compliance inspector (unless otherwise specified) following address:

Maine Department of Environmental Protection
Eastern Maine Regional Office
Bureau of Water Quality
Division of Water Quality Management
106 Hogan Road
Bangor, ME. 04401

F. REOPENING OF PERMIT FOR MODIFICATIONS

In accordance with 38 M.R.S. Section 414-A(5) and upon evaluation of the test results in the Special Conditions 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 any time 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. SEVERABILITY

In the event that any provision(s), or part thereof, of this permit is declared to be unlawful by a reviewing court, the remainder of the permit must remain in full force and effect, and must be construed and enforced in all aspects as if such unlawful provision, or part thereof, had been omitted, unless otherwise ordered by the court.

MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

AND

MAINE WASTE DISCHARGE LICENSE

FACT SHEET

DATE: MAY 15, 2018

PERMIT NUMBER: ME0037362
LICENSE NUMBER: W009097-5S-B-R

NAME AND ADDRESS OF APPLICANT:

CITY OF OLD TOWN
25 Main Street
Old Town, ME. 04468

COUNTY: Penobscot

NAME AND ADDRESS WHERE DISCHARGE OCCURS:

Congress Street/Water Street
Old Town, ME. 04468

RECEIVING WATER AND CLASSIFICATION: Penobscot River River, Class B

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: Mr. John Rouleau,
Director Of Public Works
(207) 827-3974
e-mail: john.rouleau@old-town.org

1. APPLICATION SUMMARY

- a. Application – On October 3, 2017, the Department of Environmental Protection (Department) accepted as complete for processing a complete application from the City of Old Town for the renewal of combination Maine Pollutant Discharge Elimination System (MEPDES) permit ME0037362 and Maine Waste Discharge License (WDL) W009097-5S-A-N (permit) which was issued by the Department on December 4, 2012 for a five-year term. The 12/4/12 permit authorized the intermittent discharge (every 60 days) of 3,500 gallons of swimming pool filter backwash waters to the Penobscot River, Class B, in Old Town, Maine. See **Attachment A** of this Fact Sheet for a location map.

1. APPLICATION SUMMARY (cont'd)

- b. Source Description: The waste stream regulated by this permitting action is generated by the day-to-day maintenance of the Old Town Community swimming pool. The filtration system used to treat the pool water consists of two sandfilters, a backwash tank, grit filters and chemical injection equipment. The two sand filters are backwashed every 60 days for approximately ten (10) minutes resulting in approximately 3,500 gallons of wastewater per backwash.
- b. Wastewater Treatment: The pool water typically has a total residual chlorine concentration in the range of 1.5 to 3.0 mg/L. The backwash wastewater is discharged to the City owned storm water collection system consisting of a 72-inch diameter pipe with 25 catch basins and 5,500 linear feet of pipe before discharging to the Penobscot River. The invert of the storm water pipe is \pm 8 feet above the mean low water level at the outlet.

2. PERMIT SUMMARY

This permitting action is carrying forward the terms and conditions of the previous permit.

3. CONDITIONS OF PERMIT

Conditions of licenses, 38 M.R.S. § 414-A, requires that the effluent limitations prescribed for discharges, including, but not limited to, effluent toxicity, require the application of best practicable treatment (BPT), 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, *Certain deposits and discharges prohibited*, 38 M.R.S. § 420 and Department rule *Surface Water Toxics Control Program*, 06-096 CMR 530 (effective March 21, 2012), require the regulation of toxic substances not to exceed levels set forth in *Surface Water Quality Criteria for Toxic Pollutants*, 06-096 CMR 584 (effective July 29, 2012), and that ensure safe levels for the discharge of toxic pollutants such that existing and designated uses of surface waters are maintained and protected.

4. RECEIVING WATER QUALITY STANDARDS

Classification of Major River Basins 38 M.R.S., §467(7)(A)(5) classifies the Penobscot River as a Class B waterway. *Standards for Classification of Fresh Surface Waters*, 38 M.R.S.A., §465(3) describes the standards for classification of Class B waterways.

5. RECEIVING WATER QUALITY CONDITIONS

The State of Maine 2014 *Integrated Water Quality Monitoring and Assessment Report* prepared pursuant to Sections 303(d) and 305(b) of the Federal Water Pollution Control Act, includes the receiving water in the designation *Penobscot River at Old Town - Milford* (Assessment Unit ID ME0102000509_233R_03) listed in Category 4-A: *Rivers and Streams with Impaired Use Other Than Mercury, TMDL Completed*. The listing identifies *E. coli* as the cause. Recreational use impairment for this segment is now in Category 4-A due to approval of statewide bacteria TMDL.

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS

- a. Flow: This permitting action is carrying forward the previously established daily maximum flow limit of 3,500 gallons per backwash event. The limitation is based on the permittee’s estimate of flows for each discharge.

A review of the monthly DMR data for the period January 2012 – January 2018 indicates values have been reported as follows:

Flow (DMRs = 14)

Value	Limit (GPD)	Range (GPD)	Mean (GPD)
Daily Maximum	3500	400-2800	2457

- b. Dilution Factors: Dilution factors associated with the discharge from the discharges were derived in accordance with freshwater protocols established in Department Regulation Chapter 530, *Surface Water Toxics Control Program*, dated October 2005. With daily maximum discharge rates of 3,500 gallons (filter backwash) dilution calculations are based on the following formula:

$$\text{Dilution Factor} = \frac{\text{River Flow (cfs)}(\text{Conv. Factor}) + \text{Discharge Flow (MGD)}}{\text{Discharge Flow (MGD)}}$$

$$\text{Acute: } 1\text{Q}10 = 2,521 \text{ cfs}^{(1)} \Rightarrow \frac{(2,521 \text{ cfs})(0.6464) + (0.0035 \text{ MGD})}{(0.0035 \text{ MGD})} = 465,560:1$$

$$\text{Chronic: } 7\text{Q}10 = 2,795 \text{ cfs}^{(1)} \Rightarrow \frac{(2,795 \text{ cfs})(0.6464) + (0.0035 \text{ MGD})}{(0.0035 \text{ MGD})} = 516,198:1$$

$$\text{Harmonic Mean: } 8,404 \text{ cfs}^{(2)} \Rightarrow \frac{(8,404 \text{ cfs})(0.6464) + (0.0035 \text{ MGD})}{(0.0035 \text{ MGD})} = 1,5532,100:1$$

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

Footnotes:

- (1) 7Q10 and 1Q10 critical low flow values were recalculated (lowered) in calendar year 2003 during the Department's update of the water quality model for the Penobscot River.
- (2) Harmonic mean flow from 1991 study and drainage area ratio.

- c. Total Residual Chlorine (TRC) – Limits on total residual chlorine are specified to ensure that ambient water quality standards are maintained and that best practicable treatment (BPT) technology is being applied to the discharge. The more stringent of the two limitations is established in permits/licenses. End-of-pipe water quality based concentration thresholds may be calculated as follows:

<u>Parameter</u>	<u>Acute(A) Criterion</u>	<u>Acute Dilution Factor</u>	<u>Acute Threshold</u>
Chlorine	0.019 ug/L	465,560:1	8,846 mg/L

The Department has established a daily maximum best practicable treatment limitation of 1.0 mg/L for facilities that discharge elemental chlorine or chlorine-based compounds unless the calculated acute water quality based threshold is lower than 1.0 mg/L. In the case of the pool discharges, the permittee has indicated it is reluctant to allow the TRC levels in the pool to drop to 1.0 mg/L before commencing a backwash. The permittee maintains a TRC level of 3.0 mg/L at all times to protect the health and welfare of the pool users. Therefore, the Department is making a best professional judgment that given the dilution associated with the discharge (without considering dilution in the storm water system) the discharge of TRC at 3.0 mg/L will not cause or contribute to an excursion of applicable ambient water quality criteria.

A review of the monthly Discharge Monitoring Report (DMR) data for the period January 2012 – January 2018 indicates values have been reported as follows:

TRC (DMRs = 14)

<u>Value</u>	<u>Limit (mg/L)</u>	<u>Minimum (mg/L)</u>	<u>Maximum (mg/L)</u>	<u>Mean (mg/L)</u>
Daily Maximum	3.0	7.3	7.9	2.2

6. EFFLUENT LIMITATIONS & MONITORING REQUIREMENTS (cont'd)

- d. pH – This permitting action is carrying forward the previously established pH range limits of 6.0 – 8.5 standard units based on a best professional judgment (BPJ) of BPT.

A review of the monthly Discharge Monitoring Report (DMR) data for the period January 2012 – January 2018 indicates values have been reported as follows:

pH (DMRs = 14)

Value	Limit (SU)	Minimum (SU)	Maximum (SU)
Range	6.0 – 9.0	7.3	7.9

- e. Total Suspended Solids (TSS) – This permitting action is carrying forward the previously established daily maximum reporting requirement for mass and concentration for TSS as there is no formal treatment of the filter backwash discharge.

A review of the monthly Discharge Monitoring Report (DMR) data for the period January 2012 – January 2018 indicates values have been reported as follows:

TSS mass (DMRs 14)

Value	Limit (lbs/day)	Range (lbs/day)	Mean (lbs/day)
Daily Maximum	Report	0.1 – 8.0	2.4

TSS concentration (DMRs = 14)

Value	Limit (mg/L)	Range (mg/L)	Mean (mg/L)
Daily Maximum	Report	5.0 – 343.0	104.3

7. DISCHARGE IMPACT ON RECEIVING WATER QUALITY

As permitted, the Department has determined the existing and designated water uses will be maintained and protected and the discharge will not cause or contribute to the failure of the Penobscot River to meet standards for Class B classification.

8. PUBLIC COMMENTS

Public notice of this application was made in the *Bangor Daily News* newspaper on or about September 29, 2017. The Department receives public comments on an application until the date a final agency action is taken on the application. Those persons receiving copies of draft permits must have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to *Application Processing Procedures for Waste Discharge Licenses*, 06-096 CMR 522 (effective January 12, 2001).

9. DEPARTMENT CONTACTS

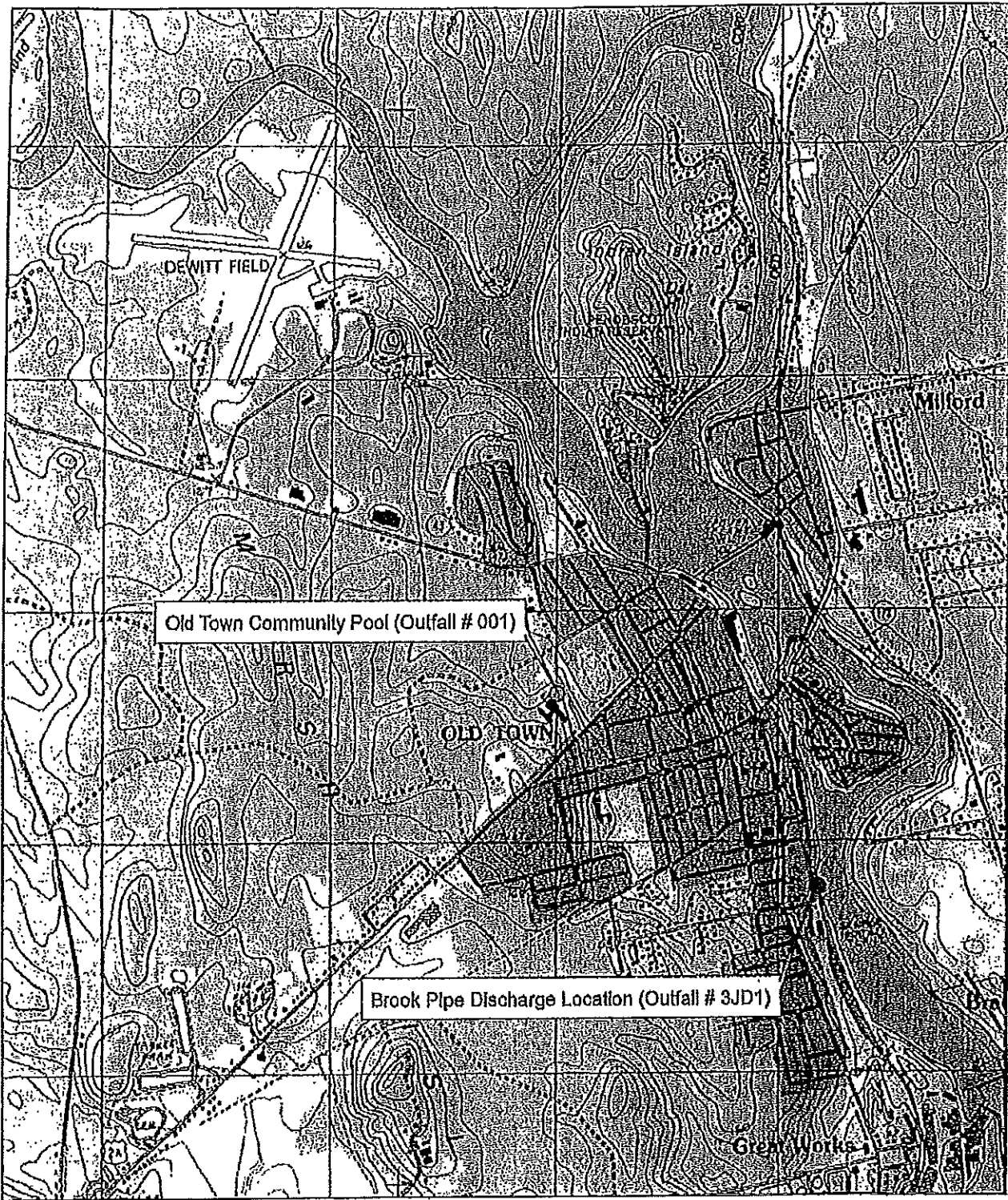
Additional information concerning this permitting action may be obtained from and written comments should be sent to:

Rod Robert
Division of Water Quality Management
Bureau of Water Quality
Department of Environmental Protection
17 State House Station
Augusta, Maine 04333-0017 Telephone: (207) 446-1875 Fax: (207) 287-3435
e-mail: rodney.robert@maine.gov

10. RESPONSE TO COMMENTS

Reserved until the end of the formal comment period

ATTACHMENT A

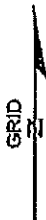


LEGEND

- ⊙ Brook_Pipe_Discharge
- ⊙ Pool_Location



1:24,000



MAP NOTES:

Source: ArcGIS Online, Maine Office of GIS
 Projection: UTM, WGS84, Zone 19N, Meters

**TOPOGRAPHIC MAP
 OLD TOWN, MAINE**

OLD TOWN COMMUNITY POOL

JN: 6532

DATE: OCTOBER 2012

