

**Rhode Island Pollutant Discharge Elimination System
General Permit for Non-contact Cooling Water Discharges**



Effective Date: October 1, 2013

Expiration Date: September 30, 2018

**Rhode Island Department of Environmental Management
Office of Water Resources
RIPDES Program**

**RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM
GENERAL PERMIT FOR NON-CONTACT COOLING WATER DISCHARGES
(Dated 6/13)**

I. GENERAL COVERAGE UNDER THIS PERMIT

- A. Permit Coverage. This permit may cover all areas of the State of Rhode Island.
- B. Wastewater Type
1. Eligibility. Except for non-contact cooling water discharges identified under Part I.B.3, this permit covers the discharge of non-contact cooling water. Non-contact cooling water is defined as water that is used to reduce temperature and which does not come into direct contact with any raw materials or intermediate, final, or waste product (other than heat).
 2. Allowable discharges. Other discharges not comprised of non-contact cooling water are allowed under this permit but are limited to the following: steam condensate that does not contain any treatment chemicals; air conditioner condensate that does not contain any treatment chemicals; hydrostatic test water that does not contain any treatment chemicals; potable water line flushings; and uncontaminated groundwater. If any of these discharges may reasonably be expected to be present and to be mixed with non-contact cooling water discharges, they must be specifically identified in the Notice of Intent (NOI).
 3. Limitations on Coverage. This permit does not authorize the following non-contact cooling water discharges:
 - a. Non-contact cooling water discharges with a total average daily flow of one (1.0) million gallons per day (MGD) or greater;
 - b. Non-contact cooling water discharges that contain any water treatment chemicals;
 - c. Non-contact cooling water discharges from facilities with an existing RIPDES individual permit, which was issued in accordance with Part IV.T of this permit;
 - d. Non-contact cooling water discharges that the Director of the Department of Environmental Management has found to be or may reasonably be expected to be contributing to a violation of water quality standards;
 - e. Non-contact cooling water discharges into the terminal reservoir of a public drinking water supply;
 - f. Non-contact cooling water discharges that may adversely affect a listed, or a proposed to be listed, endangered or threatened species or its critical habitat;
 - g. Non-contact cooling water which is co-mingled with discharges that are not an allowable discharge under this permit;
 - h. Non-contact cooling water which uses ground water, that is impacted by a release of a toxic or hazardous material; and
 - i. Non-contact cooling water which is contaminated from failing or leaking heat exchangers or process equipment being cooled.

- C. Authorization. To be covered under this general permit, owners or operators of non-contact cooling water discharges must submit to the Director a standardized Notice of Intent (NOI) form. Discharges of non-contact cooling water from three-family or smaller residential buildings, are authorized to discharge upon the effective date of this permit and are not required to submit a NOI form. Upon review of an NOI, the Director may deny coverage under this permit at any time and require submittal of an application for an individual or an alternative general permit.

1. *Deadlines for Requesting Authorization.*

- a. Facilities discharging non-contact cooling water which were authorized under the previous general permit dated July 2008, that intend to obtain coverage under this general permit; shall submit a NOI within thirty (30) days of the effective date of this permit.
- b. Facilities that propose to discharge non-contact cooling water and were not authorized under the previous general permit dated July 2008, must submit a NOI at least ninety (90) days prior to the commencement of such discharge.

2. *Granting of Authorization.*

- a. Facilities that were authorized under the previous general permit dated July 2008 that have submitted a complete NOI within thirty (30) days of the effective date of this permit, shall be automatically granted authorization to discharge upon departmental receipt of a complete NOI. Unless notified by the Director to the contrary, owners or operators who submit such notification are authorized to discharge under the terms and conditions of this permit.
- b. For facilities which commence the discharge of non-contact cooling water after the effective date of this permit and which were not authorized under the previous general permit dated July 2008, authorization will be granted ninety (90) days after the submittal of a complete NOI, unless otherwise notified by the Director in writing. Regardless of whether the NOI was actually reviewed by this department, or it became approved because of this department's failure to act within the designated timeframe, the permittee is still responsible for upholding all permit conditions and any other applicable state or federal regulations.
- c. Discharges of non-contact cooling water from three-family or smaller residential buildings, shall automatically be granted authorization to discharge on the effective date of this permit. The permittee is still responsible for upholding all permit conditions and any other applicable state or federal regulations.

- D. Termination of Coverage. Owners and/or operators of facilities must notify the Director in writing when discharge(s) of non-contact cooling water no longer occur at the facility. At that point, coverage under this permit is terminated. At a minimum, the following information is required to terminate coverage under this permit:

1. Owner's name, mailing address, and telephone number;
2. Operator's name, mailing address, and telephone number;
3. Name and location of the facility;
4. RIPDES non-contact cooling water permit number; and

5. Certification that non-contact cooling water discharge no longer occurs.
- E. Failure to Notify. Owners or operators, who fail to notify the Director of their intent to be covered under a general permit in accordance with Part I.C and discharge to waters of the State or to a separate storm sewer system without a RIPDES permit, are in violation of Chapter 46-12 of the Rhode Island General Laws and the Clean Water Act and are subject to legal action.

II. PERMIT CONDITIONS

- A. The discharge shall not cause visible discoloration of the receiving waters.
- B. The discharge shall contain neither a visible oil sheen, foam, nor floating solids.
- C. The permittee must develop and implement appropriate best management practices to ensure that discharges of non-contact cooling water are not contaminated by failing/leaking heat exchangers. Appropriate best management practices may include but not be limited to; material inventory, preventative maintenance and equipment replacement, testing of equipment (dye testing, eddy current testing, pressure testing), routine visual observations of equipment and discharge, or sampling of the discharge for an indicator pollutant. The permittee must prepare an annual self-certification report, documenting that the discharge is not contaminated, by January 15th of each year for the previous calendar year. The self-certification report must summarize the selected best management practices used to determine that the discharge is not contaminated and include the dates of all inspections, testing, maintenance/equipment replacement; the results of all inspections and testing; the personnel performing inspections, testing and maintenance; and any actions taken in response to the inspections and testing. The statement must also identify incidents where discharges have been contaminated by failing/leaking heat exchangers. The statements shall be maintained on site for a minimum period of five (5) years and must be certified in accordance with Part IV.G of the permit. These reports are subject to DEM review. If at any time the DEM requests that these reports be submitted, the permittee shall submit these reports to the DEM in accordance with the DEM's request.

D. Monitoring Requirements and Limitations for facilities that use private well water as its source water:

1. *Discharges to Fresh Water Warm Water Habitats from Private Well Water Sources with a Dilution Factor less than Fifteen (15)*

During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from each outfall of non-contact cooling water, with a dilution factor less than fifteen (15), to a drainage basin classified as a Fresh Water Warm Water Habitat.

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

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>					<u>Monitoring Requirement</u>	
	Quantity - lbs./day		Concentration - specify units			<u>Measurement Frequency</u>	<u>Sample Type</u>
	<u>Average Monthly</u>	<u>Maximum Daily</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>		
Flow	--- MGD	xxx MGD				1/Month	Calculated ¹
Temperature, Effluent					83 °F ³	1/Month	4 Grabs ²
pH			6.5 s.u.		9.0 s.u.	1/Month	4 Grabs ²

--- Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter which, for each permittee, will be limited based upon the maximum non-contact cooling water design flow indicated in the applicant's Notice of Intent.

Sampling shall be performed during a typical operating day.

¹ Flow shall be either calculated using a flow totalizer or estimated using the cooling water pumping rate.

² Compliance with these limitations shall be determined by taking a minimum of four (4) grab samples equally spaced over the course of a normal operating day. The maximum value to be reported is the highest individual measurement obtained during the monitoring period. The minimum value to be reported is the lowest individual measurement obtained during the monitoring period.

³ In no case shall the discharge cause the temperature of the receiving water be raised more than 4.0 °F.

D. Monitoring Requirements and Limitations for facilities that use private well water as its source water:

2. *Discharges to Fresh Water Warm Water Habitats from Private Well Water Sources with a Dilution Factor Equal to or Greater than Fifteen (15)*

During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from each outfall of non-contact cooling water, with a dilution factor equal to or greater than fifteen (15), to a drainage basin classified as a Fresh Water Warm Water Habitat.

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

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>			<u>Monitoring Requirement</u>			
	Quantity - lbs./day		Concentration - specify units			<u>Measurement Frequency</u>	<u>Sample Type</u>
	<u>Average Monthly</u>	<u>Maximum Daily</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>		
Flow	--- MGD	xxx MGD				1/Month	Calculated ¹
Temperature, Effluent					100 °F ³	1/Month	4 Grabs ²
pH			6.5 s.u.		9.0 s.u.	1/Month	4 Grabs ²

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Sampling shall be performed during a typical operating day.

¹ Flow shall be either calculated using a flow totalizer or estimated using the cooling water pumping rate.

² Compliance with these limitations shall be determined by taking a minimum of four (4) grab samples equally spaced over the course of a normal operating day. The maximum value to be reported is the highest individual measurement obtained during the monitoring period. The minimum value to be reported is the lowest individual measurement obtained during the monitoring period.

³ In no case shall the discharge cause the temperature of the receiving water be raised more than 4.0 °F.

D. Monitoring Requirements and Limitations for facilities that use private well water as its source water:

3. *Discharges to Fresh Water Cold Water Habitats from Private Well Water Sources with a Dilution Factor less than Fifteen (15)*

During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from each outfall of non-contact cooling water, with a dilution factor less than fifteen (15), to a drainage basin classified as a Fresh Water Cold Water Habitat.

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

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>			<u>Monitoring Requirement</u>			
	Quantity - lbs./day		Concentration - specify units			<u>Measurement Frequency</u>	<u>Sample Type</u>
	<u>Average Monthly</u>	<u>Maximum Daily</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>		
Flow	--- MGD	xxx MGD				1/Month	Calculated ¹
Temperature, Effluent					68 °F ³	1/Month	4 Grabs ²
pH			6.5 s.u.		9.0 s.u.	1/Month	4 Grabs ²

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¹ Flow shall be either calculated using a flow totalizer or estimated using the cooling water pumping rate.

² Compliance with these limitations shall be determined by taking a minimum of four (4) grab samples equally spaced over the course of a normal operating day. The maximum value to be reported is the highest individual measurement obtained during the monitoring period. The minimum value to be reported is the lowest individual measurement obtained during the monitoring period.

³ In no case shall the discharge cause the temperature of the receiving water be raised more than 4.0 °F.

D. Monitoring Requirements and Limitations for facilities that use private well water as its source water:

4. *Discharges to Fresh Water Cold Water Habitats from Private Well Water Sources with a Dilution Factor Equal to or Greater than Fifteen (15)*

During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from each outfall of non-contact cooling water, with a dilution factor equal to or greater than fifteen (15), to a drainage basin classified as a Fresh Water Cold Water Habitat.

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

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>					<u>Monitoring Requirement</u>	
	Quantity - lbs./day		Concentration - specify units			<u>Measurement Frequency</u>	<u>Sample Type</u>
	<u>Average Monthly</u>	<u>Maximum Daily</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>		
Flow	--- MGD	xxx MGD				1/Month	Calculated ¹
Temperature, Effluent					100 °F ³	1/Month	4 Grabs ²
pH			6.5 s.u.		9.0 s.u.	1/Month	4 Grabs ²

--- Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter that, for each permittee, will be limited based upon the maximum non-contact cooling water design flow indicated in the applicant's Notice of Intent.

Sampling shall be performed during a typical operating day.

¹ Flow shall be either calculated using a flow totalizer or estimated using the cooling water pumping rate.

² Compliance with these limitations shall be determined by taking a minimum of four (4) grab samples equally spaced over the course of a normal operating day. The maximum value to be reported is the highest individual measurement obtained during the monitoring period. The minimum value to be reported is the lowest individual measurement obtained during the monitoring period.

³ In no case shall the discharge cause the temperature of the receiving water be raised more than 4.0 °F.

D. Monitoring Requirements and Limitations for facilities that use private well water as its source water:

5. *Discharges to Salt Water from Private Well Water Sources*

During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from each outfall of non-contact cooling water to a drainage basin classified as a Salt Water Habitat.

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

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>				<u>Monitoring Requirement</u>		
	Quantity - lbs./day		Concentration - specify units		Sample Measurement	Frequency	Type
	Average Monthly	Maximum Daily	Minimum	Average			
Flow	--- MGD	xxx MGD				1/Month	Calculated ¹
Temperature, Effluent					83 °F ³	1/Month	4 Grabs ²
pH			6.5 s.u. ⁴		8.5 s.u. ⁴	1/Month	4 Grabs ²

--- Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

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Sampling shall be performed during a typical operating day.

¹ Flow shall be either calculated using a flow totalizer or estimated using the cooling water pumping rate.

² Compliance with these limitations shall be determined by taking a minimum of four (4) grab samples equally spaced over the course of a normal operating day. The maximum value to be reported is the highest individual measurement obtained during the monitoring period. The minimum value to be reported is the lowest individual measurement obtained during the monitoring period.

³ In no case shall the discharge cause the temperature of the receiving water be raised more than 4.0 °F (from October 1 through June 16) or more than 1.6 °F (from June 16 through September 30).

⁴ In no case shall the discharge cause the pH of the receiving water be more than 0.2 s.u. outside of the normally occurring range.

E. Monitoring Requirements and Limitations for facilities that use either the receiving water or a municipal water supply as its source water:

1. *Discharges to Fresh Water Warm Water Habitats with a Dilution Factor less than Fifteen (15)*

During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from each outfall of non-contact cooling water, with a dilution factor less than fifteen (15), to a drainage basin classified as a Fresh Water Warm Water Habitat. Such discharges shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>				<u>Monitoring Requirement</u>		
	Quantity - lbs./day		Concentration - specify units		Sample Measurement	Frequency	Type
	Average Monthly	Maximum Daily	Minimum	Average			
Flow	--- MGD	xxx MGD				1/Month	Calculated ¹
Temperature, Effluent					83 °F ³	1/Month	4 Grabs ²
pH influent ⁴			--- s.u.		--- s.u.	1/Month	4 Grabs ²
pH effluent ⁴			--- s.u.		--- s.u.	1/Month	4 Grabs ²
pH change ⁴					0.5 s.u. ³	1/Month	Calculated

--- Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

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Sampling shall be performed during a typical operating day.

¹ Flow shall be either calculated using a flow totalizer or estimated using the cooling water pumping rate.

² Compliance with these limitations shall be determined by taking a minimum of four (4) grab samples equally spaced over the course of a normal operating day. The maximum value to be reported is the highest individual measurement obtained during the monitoring period. The minimum value to be reported is the lowest individual measurement obtained during the monitoring period.

³ In no case shall the discharge cause the receiving water's temperature to be raised more than 4.0 °F or the pH to be outside of the range of 6.5 – 9.0 s.u.

⁴ Sampling for influent and effluent shall be conducted using appropriate allowances for hydraulic detention (flow-through) time. These values will then be used to calculate the pH change. The maximum value to be reported is the largest individual pH change calculated for the reporting period.

E. Monitoring Requirements and Limitations for facilities that use either the receiving water or a municipal water supply as its source water:

2. *Discharges to Fresh Water Warm Water Habitats with a Dilution Factor Equal to or Greater than Fifteen (15)*

During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from each outfall of non-contact cooling water, with a dilution factor equal to or greater than fifteen (15), to a drainage basin classified as a Fresh Water Warm Water Habitat. Such discharges shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>					<u>Monitoring Requirement</u>	
	Quantity - lbs./day		Concentration - specify units			<u>Measurement Frequency</u>	<u>Sample Type</u>
	<u>Average Monthly</u>	<u>Maximum Daily</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>		
Flow	--- MGD	xxx MGD				1/Month	Calculated ¹
Temperature, Effluent					100 °F ³	1/Month	4 Grabs ²
pH influent ⁴			--- s.u.		--- s.u.	1/Month	4 Grabs ²
pH effluent ⁴			--- s.u.		--- s.u.	1/Month	4 Grabs ²
pH change ⁴					0.5 s.u. ³	1/Month	Calculated

--- Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter that, for each permittee, will be limited based upon the maximum non-contact cooling water design flow indicated in the applicant's Notice of Intent.

Sampling shall be performed during a typical operating day.

¹ Flow shall be either calculated using a flow totalizer or estimated using the cooling water pumping rate.

² Compliance with these limitations shall be determined by taking a minimum of four (4) grab samples equally spaced over the course of a normal operating day. The maximum value to be reported is the highest individual measurement obtained during the monitoring period. The minimum value to be reported is the lowest individual measurement obtained during the monitoring period.

³ In no case shall the discharge cause the receiving water's temperature to be raised more than 4.0 °F or the pH to be outside of the range of 6.5 – 9.0 s.u.

⁴ Sampling for influent and effluent shall be conducted using appropriate allowances for hydraulic detention (flow-through) time. These values will then be used to calculate the pH change. The maximum value to be reported is the largest individual pH change calculated for the reporting period.

E. Monitoring Requirements and Limitations for facilities that use either the receiving water or a municipal water supply as its source water:

3. *Discharges to Fresh Water Cold Water Habitats with a Dilution Factor less than Fifteen (15)*

During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from each outfall of non-contact cooling water, with a dilution factor less than fifteen (15), to a drainage basin classified as a Fresh Water Cold Water Habitat. Such discharges shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>					<u>Monitoring Requirement</u>	
	Quantity - lbs./day		Concentration - specify units			<u>Measurement Frequency</u>	<u>Sample Type</u>
	<u>Average Monthly</u>	<u>Maximum Daily</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>		
Flow	--- MGD	xxx MGD				1/Month	Calculated ¹
Temperature, Effluent					68 °F ³	1/Month	4 Grabs ²
pH influent ⁴			--- s.u.		--- s.u.	1/Month	4 Grabs ²
pH effluent ⁴			--- s.u.		--- s.u.	1/Month	4 Grabs ²
pH change ⁴					0.5 s.u. ³	1/Month	Calculated

--- Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter that, for each permittee, will be limited based upon the maximum non-contact cooling water design flow indicated in the applicant's Notice of Intent.

Sampling shall be performed during a typical operating day.

¹ Flow shall be either calculated using a flow totalizer or estimated using the cooling water pumping rate.

² Compliance with these limitations shall be determined by taking a minimum of four (4) grab samples equally spaced over the course of a normal operating day. The maximum value to be reported is the highest individual measurement obtained during the monitoring period. The minimum value to be reported is the lowest individual measurement obtained during the monitoring period.

³ In no case shall the discharge cause the receiving water's temperature to be raised more than 4.0 °F or the pH to be outside of the range of 6.5 – 9.0 s.u.

⁴ Sampling for influent and effluent shall be conducted using appropriate allowances for hydraulic detention (flow-through) time. These values will then be used to calculate the pH change. The maximum value to be reported is the largest individual pH change calculated for the reporting period.

E. Monitoring Requirements and Limitations for facilities that use either the receiving water or a municipal water supply as its source water:

4. *Discharges to Fresh Water Cold Water Habitats with a Dilution Factor Equal to or Greater than Fifteen (15)*

During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from each outfall of non-contact cooling water, with a dilution factor equal to or greater than fifteen (15), to a drainage basin classified as a Fresh Water Cold Water Habitat. Such discharges shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>					<u>Monitoring Requirement</u>	
	Quantity - lbs./day		Concentration - specify units			<u>Measurement Frequency</u>	<u>Sample Type</u>
	<u>Average Monthly</u>	<u>Maximum Daily</u>	<u>Minimum</u>	<u>Average</u>	<u>Maximum</u>		
Flow	--- MGD	xxx MGD				1/Month	Calculated ¹
Temperature, Effluent					100 °F ³	1/Month	4 Grabs ²
pH influent ⁴			--- s.u.		--- s.u.	1/Month	4 Grabs ²
pH effluent ⁴			--- s.u.		--- s.u.	1/Month	4 Grabs ²
pH change ⁴					0.5 s.u. ³	1/Month	Calculated

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Sampling shall be performed during a typical operating day.

¹ Flow shall be either calculated using a flow totalizer or estimated using the cooling water pumping rate.

² Compliance with these limitations shall be determined by taking a minimum of four (4) grab samples equally spaced over the course of a normal operating day. The maximum value to be reported is the highest individual measurement obtained during the monitoring period. The minimum value to be reported is the lowest individual measurement obtained during the monitoring period.

³ In no case shall the discharge cause the receiving water's temperature to be raised more than 4.0 °F or the pH to be outside of the range of 6.5 – 9.0 s.u.

⁴ Sampling for influent and effluent shall be conducted using appropriate allowances for hydraulic detention (flow-through) time. These values will then be used to calculate the pH change. The maximum value to be reported is the largest individual pH change calculated for the reporting period.

E. Monitoring Requirements and Limitations for facilities that use either the receiving water or a municipal water supply as its source water:

5. Discharges to Salt Water

During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from each outfall of non-contact cooling water to a drainage basin classified as a Salt Water Habitat. Such discharges shall be limited and monitored as specified below:

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>				<u>Monitoring Requirement</u>	
	Quantity - lbs./day		Concentration - specify units		<u>Measurement Frequency</u>	<u>Sample Type</u>
	<u>Average Monthly</u>	<u>Maximum Daily</u>	<u>Minimum</u>	<u>Average</u>		
Flow	--- MGD	xxx MGD				1/Month Calculated ¹
Temperature, Effluent					83 °F ³	1/Month 4 Grabs ²
pH influent ⁵			--- s.u.		--- s.u.	1/Month 4 Grabs ²
pH effluent ⁵			--- s.u.		--- s.u.	1/Month 4 Grabs ²
pH change ⁵					0.5 s.u. ⁴	1/Month Calculated

--- Signifies a parameter which must be monitored and data must be reported; no limit has been established at this time.

xxx Signifies a parameter that, for each permittee, will be limited based upon the maximum non-contact cooling water design flow indicated in the applicant's Notice of Intent.

Sampling shall be performed during a typical operating day.

¹ Flow shall be either calculated using a flow totalizer or estimated using the cooling water pumping rate.

² Compliance with these limitations shall be determined by taking a minimum of four (4) grab samples equally spaced over the course of a normal operating day. The maximum value to be reported is the highest individual measurement obtained during the monitoring period. The minimum value to be reported is the lowest individual measurement obtained during the monitoring period.

³ In no case shall the discharge cause the temperature of the receiving water be raised more than 4.0 °F (from October 1 through June 16) or more than 1.6 °F (from June 16 through September 30).

⁴ In no case shall the discharge cause the pH of the receiving water be more than 0.2 s.u. outside of the normally occurring range.

⁵ Sampling for influent and effluent shall be conducted using appropriate allowances for hydraulic detention (flow-through) time. These values will then be used to calculate the pH change. The maximum value to be reported is the largest individual pH change calculated for the reporting period.

- F. Monitoring Requirements and Limitations for Three-Family or Smaller Residential Geothermal Discharges: Discharges from residential geothermal heat exchangers at three-family or smaller residential buildings do not have any specific reporting requirements. However, discharges from these facilities into saltwater receiving waters shall not cause the temperature of the receiving water be raised more than 4.0 °F (from October 1 through June 16) or more than 1.6 °F (from June 16 through September 30) and shall not cause the pH of the receiving water to be more than 0.2 s.u. outside of the normally occurring range. Discharges from these facilities into freshwater receiving waters shall not cause the receiving water's temperature to be raised more than 4.0 °F or the pH to be outside of the range of 6.5 – 9.0 s.u.
- G. Test Methods. Standard test methods promulgated in 40 CFR 136 must be used to conduct effluent analyses.
- H. Reporting. Monitoring results obtained during the previous calendar quarter shall be summarized and reported on Discharge Monitoring Report (DMR) Forms, postmarked no later than the 15th day of the month following the completed reporting period. The first report is due for the calendar quarter during which the facility obtained coverage under this general permit. Testing shall be reported as follows:

<u>Quarter Testing to be Performed</u>	<u>Report Due No Later Than</u>	<u>Results Submitted with DMR for</u>
January 1 – March 31	April 15	March
April 1 – June 30	July 15	June
July 1 – September 30	October 15	September
October 1 - December 31	January 15	December

Signed copies of these, and all other reports required herein, shall be submitted to:

Rhode Island Department of Environmental Management
RIPDES Program
235 Promenade Street
Providence, Rhode Island 02908

- I. Failure to Comply. Failure to meet the monitoring requirements under this part of the permit constitutes a violation of Chapter 46-12 of Rhode Island General Laws and the Clean Water Act; and may be subject to legal action.

III. NOTICE OF INTENT REQUIREMENTS

A. Contents of Notice of Intent

1. The owner's name, mailing address, telephone number, ownership status, and status as a Federal, State, private, public, or other entity;
2. The operator's name, address, telephone number, ownership status and status as a Federal, State, private, public or other entity;
3. Up to four (4) digit SIC code that best represents the principal products or activities provided by the facility;
4. The location of each outfall, including the latitude and longitude of the approximate center of the outfall to the nearest 15 seconds, for which the NOI is being submitted;

5. The name of the receiving water(s) or if the discharge is through a municipal separate storm sewer, the name of the operator of the storm sewer system and the ultimate receiving water(s);
 6. The type of receiving water (e.g., Saltwater, Warm Water Freshwater Habitat, or Cold Water Freshwater Habitat);
 7. A topographic map of the area extending at least extending one (1) mile beyond the property boundaries of the facility that clearly shows the legal boundaries of the facility and the location of each intake structure and each outfall;
 8. A list of any allowable discharges, as described in Part I.B.2 of this permit, that are known or are reasonably expected to be present at the site;
 9. A line drawing of the facility that shows both the non-contact cooling water and the allowable discharge water flow through the facility from intake to discharge and describes any treatment that the water receives;
 10. An identification of the source of the non-contact cooling water;
 11. A description of the average frequency (days/week), duration (hours/day), and flow (gallons per minute) of the non-contact cooling water discharge;
 12. For discharges of non-contact cooling water that commence after the effective date of this permit, the NOI must indicate the anticipated date on which the facility will begin to discharge; and
 13. Any additional information that may be required by the Department to be included as part of the NOI, if the Director determines that such information is reasonably necessary to determine whether or not to authorize the discharge under this permit.
 14. For discharges to fresh water, calculate the approximate instream dilution factor based on an aquatic low-flow analysis. (See the NOI instructions to determine how to calculate an instream dilution factor.)
- B. Where to Submit. A completed and signed NOI, in accordance with Part IV.G, must be submitted to:

Rhode Island Department of Environmental Management
RIPDES Program
235 Promenade Street
Providence, Rhode Island 02908

- C. Deficient NOI. If any portion of the NOI does not meet one or more of the minimum requirements of this part, then the applicant will be notified by a deficiency letter at any point within the review period. It is the responsibility of the applicant to make all required changes and resubmit the NOI. The review period will recommence upon the receipt of the revised NOI.

IV. GENERAL REQUIREMENTS

- A. Duty to Comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of Chapter 46-12 of the Rhode Island General Laws and the CWA and is grounds for enforcement action which may include permit termination, revocation and reissuance, modification, or for the denial of a permit renewal application and the imposition of penalties.

1. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate this requirement.
 2. Section 309 of the CWA provides significant penalties for any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318 or 405 of the CWA or any permit condition or limitation implementing any such sections in a permit issued under Section 402 of the CWA. Any person who violates any condition of this permit is subject to a civil penalty of up to \$25,000 per day of such violation, as well as any other appropriate sanctions provided by Section 309 of the CWA. Section 309(c)(4) of the CWA provides that any person who knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished by a fine of up to \$10,000 or by imprisonment of not more than two (2) years, or by both.
 3. Chapter 46-12 of the Rhode Island General Laws provides that any person who violates a permit condition is subject to a civil penalty of not more than \$25,000 per day of such violation. Any person who willfully or negligently violates a permit condition is subject to a criminal penalty of not more than \$25,000 per day of such violation and imprisonment for not more than five (5) years, or both. Any person who knowingly makes any false statement in connection with the permit is subject to a criminal penalty of not more than \$5,000 for each instance of violation or by imprisonment for not more than thirty (30) days, or both.
- B. Continuation of the Expired General Permit. Provided the permittee has re-applied in accordance with paragraph C below, an expired general permit continues in force and effect until a new general permit is issued. Only those facilities previously authorized to discharge under the expired permit are covered by the continued permit.
- C. Duty to Reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain coverage under a new permit. The permittee shall submit a new application at least 30 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Director.
- D. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- E. Duty to Mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit, which has a reasonable likelihood of adversely affecting human health or the environment.
- F. Duty to Provide Information. The permittee shall furnish to the Department, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking, and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall furnish to the Director any copies that are required to be kept as part of this permit.
- G. Signatory Requirements. All Notices of Intent, reports, certifications or information either submitted to the Director, or that this permit requires to be maintained by the permittee, shall be signed and certified in accordance with Rule 12 of the RIPDES

regulations. Rhode Island General Laws, Chapter 46-12 provides that any person who knowingly makes an false statements, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of up to \$25,000 per violation, or by imprisonment for not more than thirty (30) days per violation, or by both.

- H. Oil and Hazardous Substance Liability. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the CWA.
- I. Release in Excess of Reportable Quantities. If a release in excess of reportable quantities occurs, the permittee must notify the Office of Water Resources immediately. This permit does not relieve the permittee of the reporting requirements of 40 CFR 117 and 40 CFR 302.
- J. Property Rights. The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations.
- K. Severability. The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.
- L. Transfers. This permit is not transferable to any person except after notice to the Director. The Director may require the operator to apply for and obtain an individual RIDES permit as stated in Part IV.T. of this permit.
- M. State Laws. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law.
- N. Proper Operations and Maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operations of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions of the permit.
- O. Monitoring and Records
 - 1. Samples and measurements taken for the purpose of monitoring shall be representative of the volume and nature of the discharge over the sampling and reporting period.
 - 2. The permittee shall retain records of all monitoring including all calibration and maintenance records and all original strip chart recordings from continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least five (5) years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

3. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
4. Monitoring must be conducted according to test procedures approved under 40 CFR 136 and applicable Rhode Island regulations, unless other test procedures have been specified in this permit.
5. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall upon conviction, be punished by a fine of up to \$27,500 per violation or by imprisonment for not more than six months per violation, or by both. Chapter 46-12 of the Rhode Island General Laws also provides that such acts are subject to a fine of up to \$25,000 per violation, or by imprisonment for not more than thirty (30) days per violation, or by both.
6. Monitoring results must be reported on a Discharge Monitoring Report (DMR).
7. If the permittee monitors any pollutants more frequently than required by this permit, using test procedures approved under 40 CFR 136, applicable State regulations, or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.

P. Bypass

1. *Anticipated Bypass.* If the permittee knows in advance of the need for a bypass, he or she shall notify this Department in writing at least ten days prior to the date of the bypass. Such notice shall include the anticipated quantity and the anticipated effect of the bypass.
2. *Unanticipated Bypass.* The permittee shall submit notice of an unanticipated bypass. Any information regarding the unanticipated bypass shall be provided orally within twenty-four hours from the time the permittee became aware of the circumstances. A written submission shall also be provided within five (5) days of the time the permittee became aware of the bypass. The written submission shall contain a description of the bypass and its cause; the period of the bypass, including exact dates and times, and if the bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent reoccurrence of the bypass.
3. *Prohibition of Bypass.*
 - a. Bypass is prohibited and enforcement action against the permittee may be taken for the bypass unless:
 - i. The bypass was unavoidable to prevent loss of life, personal injury or severe property damage;

- ii. There was no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated waste, or maintenance during normal periods of equipment downtime. This condition is not satisfied if the permittee should, in the exercise of reasonable engineering judgement, have installed adequate backup equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
 - iii. The permittee submitted notices as required in paragraphs IV.P.1. and IV.P.2. above.
- b. The Director may approve an anticipated bypass after considering its adverse effects, if the Director determines that it will meet the three conditions of paragraph P.3.a, above.

Q. Upset Conditions

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit limitations if the requirements of Part IV.Q.2. below are met. No determination made during administrative review of claims that non-compliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
2. A permittee who wishes to establish an affirmative defense of an upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence, that:
 - a. An upset occurred and the permittee can identify the specific causes(s) of the upset;
 - b. The permittee facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required in Rule 14.08 of the RIPDES Regulations; and
 - d. The permittee complied with any remedial measures required under Rule 14.05 of the RIPDES Regulations.
3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

R. Inspection and Entry. The permittee shall allow the Director or an authorized representative of DEM, upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
2. Have access to and copy at reasonable times; any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment, or operations regulated or required under this permit; and
 4. Sample or monitor any substances or parameters at any location, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA or Rhode Island General Law.
- S. Permit Actions. This permit may be modified, revoked and reissued, or terminated for cause, including but not limited to: violation of any terms or conditions of this permit; obtaining the permit by misrepresentation or failure to disclose all relevant facts; or a change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- T. Requiring an Individual Permit or an Alternative General Permit
1. The Director of the Department of Environmental Management (DEM) may require any owner or operator authorized to discharge under this permit to apply for and obtain either an individual or an alternative RIPDES general permit. Any interested person may petition the Director to take action under this paragraph. The Director may determine at his or her own discretion that an individual or an alternative general permit is required.
 2. Any owner or operator authorized to discharge by this permit may request to be excluded from coverage of this permit by applying for an individual permit. The owner or operator shall submit an individual application with reasons supporting the request to the Director. The request may be granted by issuance of an individual permit or an alternative general permit, if the reasons cited by the owner or operator are adequate to support the request. The Director shall notify the permittee within a timely fashion as to whether or not the request has been granted.
 3. If a facility requests or is required to obtain coverage under an individual or an alternative general permit, then authorization to discharge non-contact cooling water under this permit shall automatically be terminated on the date of issuance of the individual or the alternative general permit. Until such time as an alternative permit is issued, the existing general permit remains fully in force.
- U. Reopener Clause. The Director reserves the right to make appropriate revisions to this permit in order to incorporate any appropriate effluent limitations, schedules of compliance, or other provisions which may be authorized under the CWA or State Law. In accordance with Rule 15 and 23 of the RIPDES Regulations, if any effluent standard or prohibition, or water quality standard is promulgated under the CWA or under State Law which is more stringent than any limitation on the pollutants limited in this permit, or controls pollutants not limited in the permit; then the Director may promptly reopen the permit and modify or revoke and reissue the permit to conform to the applicable standard.
- V. Availability of Reports. Except for data determined to be confidential under Part W. below, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the DEM at 235 Promenade Street, Providence Rhode Island. As required by the CWA, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the CWA and under section 46-12-14 of the Rhode Island General Laws.

W. Confidentiality of Information

1. Any information submitted to DEM pursuant to these regulations may be claimed as confidential by the submitter, consistent with Rhode Island General Law 38-2-2. Any such claim must be asserted at the time of the submission in the manner prescribed on the application form or instructions or, in the case of other submissions, by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, DEM may make the information available to the public without further notice.
2. Claims of confidentiality for the following information will be denied:
 - a. The name and address of any permit application or permittee;
 - b. Permit applications, permits and any attachments thereto; and
 - c. RIPDES effluent data.

- X. Right to Appeal. Within thirty (30) days of receipt of notice of final authorization, the permittee or any interested person may submit a request to the Director for an adjudicatory hearing to appeal the decision to be covered under the general permit. The request for a hearing must conform to the requirements of Rule 49 of the RIPDES Regulations.



**RHODE ISLAND POLLUTANT DISCHARGE
 ELIMINATION SYSTEM (RIPDES)
 NOTICE OF INTENT (NOI)
 GENERAL PERMIT FOR
 NON-CONTACT COOLING WATER DISCHARGES**

DEM USE ONLY

Date Received
 Amount Received \$
 RIPDES# **RI**
 Approval Date
 Data Entry Date
 Data Entry Initials

I. OWNER:

Name:			
Mailing Address:			
City:	State:	Zip:	Phone: ()
Contact Person:	Title:		

II. OPERATOR (if different from Owner):

Name:			
Mailing Address:			
City:	State:	Zip:	Phone: ()
Contact Person:	Title:		

III. STANDARD INDUSTRIAL CLASSIFICATION CODE:

Primary SIC Code:	Type of Business:
Secondary SIC Code:	Type of Business:

IV. OUTFALL LOCATION:

Attach a topographic map of the facility including Property Boundaries of the Facility and the Location of Each Intake and Outfall Structure.

Outfall #:	Latitude	Deg.	Min.	Sec.	Longitude	Deg.	Min.	Sec.

V. RECEIVING WATER INFORMATION:

<input type="checkbox"/> Separate Storm Sewer System	Name:
<input type="checkbox"/> Directly to Receiving Water	Name: Classification:
Receiving Water Habitat Type:	<input type="checkbox"/> Saltwater <input type="checkbox"/> Warm Water Freshwater <input type="checkbox"/> Cold Water Freshwater

VI. DILUTION FACTOR (FRESHWATER ONLY):

Receiving Water 7Q10 (cfs) at the point of discharge:	
Total Combined System Design Flow (cfs):	Dilution Factor:

VII. ALLOWABLE DISCHARGE INFORMATION:

Types of Allowable Discharges that are Discharged:	
<input type="checkbox"/> Steam Condensate that does not contain Treatment Chemicals	<input type="checkbox"/> Potable Water Line Flushings
<input type="checkbox"/> Hydrostatic Test Water that does not contain Treatment Chemicals	<input type="checkbox"/> Uncontaminated Groundwater
<input type="checkbox"/> Air Conditioner Condensate that does not contain Treatment Chemicals	

VIII. NON-CONTACT COOLING WATER SYSTEM INFORMATION:

Attach a line drawing of the non-contact cooling water flow through the facility including: Source of the intake water; all allowable discharges (see Part VII); a flow schematic of the facility depicting all major processes that use non-contact cooling water and all sources of allowable discharges; the method of discharge (i.e., separate storm sewer system or surface water); the name of the receiving water; any control equipment (i.e., flow meters, valves, etc.); and the sample location.	
Is there an Existing RIPDES Permit for this Discharge: <input type="checkbox"/> Yes <input type="checkbox"/> No	If Yes Permit #:

IX. DISCHARGE FREQUENCY:

Is this an Existing Discharge: <input type="checkbox"/> Yes <input type="checkbox"/> No		If No Anticipated Discharge Date:	
Frequency of Discharge:	Days/Week:	Hours/Day:	Gallons/Min:

X. CHEMICAL ADDITIVE CERTIFICATION:

I certify under penalty of law that chemical additives are not used in the non-contact cooling water treatment system nor are any treatment chemicals added to any of the allowable discharges identified as being present in Section VII of this NOI.	
Print Name	_____
Print Title	_____
Signature	_____ Date _____

XI. OWNER/OPERATOR CERTIFICATION:

I certify under penalty of law that I have read and understood all terms and conditions of the above referenced General Permit. I also certify under penalty of law that this document and all attachments were prepared under the direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	
Print Owner Name	_____
Print Owner Title	_____
Signature	_____ Date _____
Print Operator Name	_____
Print Operator Title	_____
Signature	_____ Date _____

INSTRUCTIONS FOR THE RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM (RIPDES)
NOTICE OF INTENT (NOI) - GENERAL PERMIT FOR NON-CONTACT COOLING WATER DISCHARGES

Who Must File A Notice of Intent (NOI) Form

Discharges of non-contact cooling water to Waters of the State are prohibited without a Rhode Island Pollutant Discharge Elimination System (RIPDES) permit. The owner/operator of a facility that has such a discharge must submit a Notice of Intent (NOI) and obtain coverage under the RIPDES General Permit prior to discharge. If you have questions about whether you need a permit, contact the RI Department of Environmental Management, RIPDES Program at 401-222-4700. An originally signed NOI form must be sent to:

RIDEM - Office of Water Resources
RIPDES Program
235 Promenade Street
Providence, Rhode Island 02908

Please be sure to keep a copy for your files.

Section I - Owner Information

Give the legal name of the person, firm, public (municipal) organization, or any other entity that owns the facility described in this application (RIPDES Rules 3 & 12). The name of the owner may or may not be the same as the name of the facility. Do not use a colloquial name. Enter the complete address and telephone number of the owner.

Section II - Operator Information

If the operator is the same as the owner, enter "Same as Owner". Give the legal name of the person, firm, public (municipal) organization, or any other entity that operates the facility described in this application (RIPDES Rules 3 & 12). The name of the operator may or may not be the same as that of the facility. The operator is the entity that controls the day-to-day operation of the facility. Do not use a colloquial name. Enter the complete address and telephone number of the operator.

Section III – Standard Industrial Classification Code

Enter the facility's primary and secondary four digit Standard Industrial Classification (SIC) Codes that best represent the products produced or activities provided by the facility.

Section IV – Outfall Location

Attach a topographic map, which extends at least one (1) mile beyond the property boundaries of the facility that clearly shows the legal boundaries of the facility and the location of each intake and outfall structure. The NOI must also list the latitude and longitude, to the nearest fifteen (15) seconds, of the center of each outfall structure.

Section V - Receiving Water Information

If the storm water discharges to a separate storm sewer system check the "separate storm sewer system" box and enter the name of the operator of the storm sewer system and the name of the ultimate surface water. If the site discharges storm water directly to a surface water body check the "directly to receiving water" box and enter the

name of the receiving water. To determine the receiving water classification and habitat type:

- Step 1: Go to: <http://www.dem.ri.gov/maps/index.htm>
- Step 2: Select Environmental Resource Map.
- Step 3: Click on the "Show Contents of Map" button on the left hand side of the map.
- Step 4: Activate the appropriate layer by selecting the "Surface Water Status" box in the drop down menu.
- Step 5: Search for the facility by entering the facility address in the search box in the upper right hand corner of the map.
- Step 6: Find the ultimate receiving water and click on the receiving water body in the vicinity of the ultimate discharging point to obtain the necessary information to be entered into the NOI. Information regarding the receiving water body will be shown in a pop-up box on the screen, such as the name of the water body ("NAME"), cold/warm water habitat classification ("Cold"), and water body classification ("WQS").

Section VI - Dilution Factor Information (Freshwater Discharges)

Complete the attached worksheet to determine the equivalent 7Q10 (7Q10 EQ) flow at the point of discharge and the dilution factor. Enter the 7Q10 EQ in the box labeled "Receiving water 7Q10". Enter the dilution factor and the total combined system design flow in the appropriate boxes. The total combined treatment system design flow is the sum of the non-contact cooling water flows and the allowable discharge water flows for all outfalls. Please note that DEM shall use a dilution factor of one (1) for all discharges to lakes, ponds, and wetlands. DEM also reserves the right to specify the dilution factor to be used in a given watershed.

If a point of discharge is located in a watershed without a USGS gage then one of the following methods may be used to estimate the 7Q10:

1. USGS Report 95-4299, *Low-Flow Characteristics of Selected Streams in Northern Rhode Island*. This report uses an equation based on statistical methods to estimate the 7Q10 flow of selected streams with partial record stations. Flow data from an index station is required.
2. USGS Report 93-4046, *Low-Flow Characteristics of Selected Streams in Rhode Island*. This report provides an equation to estimate the 7Q10 flow at ungauged sites based on the drainage area and the distribution of geologic materials in the drainage area. The areas of the drainage basin underlain by coarse-

grained stratified drift and underlain by till-covered bedrock are required to use this method.

3. USGS Report 93-4092, *Effects of Surficial Geology, Lakes and Swamps, and Annual Water Availability of Low Flows of Streams in Central New England and Their Use in Low-Flow Estimation*.

This report contains equations to estimate the 7Q10 flow using information regarding surficial geology, area of swamps and lakes, mean basin elevation, mean runoff, main stream length channel, and drainage basin area.

These reports can be obtained by contacting the USGS at: U.S. Geological Survey, Earth Science Information Center, Open-File Reports Section, Box 25286, MS 517, Denver Federal Center, Denver, CO, 80225.

Section VII – Allowable Discharge Information

Identify any allowable discharges, other than non-contact cooling water, that are discharged from the facility.

Section VIII - Non-Contact Cooling Water System Information

Attach a line drawing of the facility that identifies the flow of non-contact cooling water through the facility from intake to discharge. The line drawing must clearly identify the source of the non-contact cooling water. Also attach a description (i.e., a brief narrative and cut sheets/drawings) of the type of equipment that the non-contact cooling water is used for.

Section IX – Discharge Frequency

Enter the frequency of non-contact cooling water discharge and, for new discharges, the date on which the facility anticipates initiating discharge.

Section X – Chemical Additive Certification

Provide certification that no chemical additives are added to the discharge. Note: If chemical additives are used, the discharge is not eligible for coverage under the General Permit.

Section XI - Owner/Operator Certification

State and Federal statutes provide for severe penalties for submitting false information on this application form and require this application to be signed as follows (RIPDES Rule 12):

For a corporation: by a responsible corporate officer, which means: (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

For a partnership or sole proprietorship: by a general

partner or the proprietor;

For a Municipality, State, Federal or other public facility: by either a principal executive officer or ranking elected official.

**Dilution Determination Worksheet for use with the RIPDES
General Permit for Non-Contact Cooling Water Discharges**

1. Determine the point of discharge. The point of discharge is the location where the effluent first enters a surface water body.

2. Using a USGS map and the gauge station list given in the attached USGS table of 7Q10 Statistics for Rhode Island Stations, locate the gauge station that is closest to the point of discharge. The gauge station must be in the same watershed as the point of discharge. If there is not a gauge station located in the watershed, please refer to the list of approved methods for estimating flow found in Section IV of the instructions for the RIPDES Notice of Intent.

3. Find the drainage area of the watershed that is upstream of the gauge station. (Given in the attached table.)

$$DA_{\text{Upstream of Gauge}} =$$

4. Find the 7Q10 flow for the gauge station from the attached table.

$$7Q10 \text{ Gauge} =$$

5. Determine the drainage area of the watershed that is upstream from the point of discharge.

$$DA_{\text{Upstream of Discharge}} =$$

6. Calculate the equivalent 7Q10 flow using the following formula:

$$7Q10 \text{ EQ} = \frac{7Q10 \text{ Gauge}}{DA_{\text{Upstream of Gauge}}} \times DA_{\text{Upstream of Discharge}} =$$

7. Calculate the dilution factor using the following formula:

$$\text{Dilution Factor} = \frac{\{(7Q10 \text{ EQ}) + (\text{Total Combined System Design Flow})\}}{\{\text{Total Design Discharge Flow}\}} =$$

7Q10 STATISTICS FOR RHODE ISLAND GAGING STATIONS
 (Statistics Based on Start of Period of Record Through Indicated Water Year)

STATION NUMBER (Feet)	STATION NAME & LOCATION	STARTING WATER YEAR	DRAINAGE AREA (Sq. Miles)	7Q10 (Cubic Ft/Second)
ACTIVE STATIONS¹				
01109403	Ten Mile River @ East Providence	1988	53.1	15.56
01111300	Nipmuc River Near Harrisville	1965	16.0	0.37
01111500	Branch River @ Forestdale	1941	91.2	13.69
01112500	Blackstone River @ Woonsocket*	1930	416	102.25
01114000	Moshassuck River @ Providence**	1965	23.1	4.22
01114500	Woonasquatucket River @ Centerdale	1943	38.3	7.81
01116000	South Branch Pawtuxet River @ Wash- ington*	1942	63.8	17.08
01116500	Pawtuxet River @ Cranston*	1941	200	70.90
01117000	Hunt River Near East Greenwich**	1942	23.0	1.23
01117350	Chipuxet River @ West Kingston**	1959, 1973	9.99	2.82
01117420	Usquepaug River Near Usquepaug	1959, 1975	36.1	7.16
01117468	Beaver River Near Usquepaug	1976	8.87	2.01
01117500	Pawcatuck River @ Wood River Junction	1942	100	28.48
01117800	Wood River Near Arcadia	1965	35.2	7.24
01118000	Wood River @ Hope Valley	1942	72.4	20.65
01118500	Pawcatuck River @ Westerly	1942	295	69.59
DISCONTINUED STATIONS²				
01106000	Adamsville Brook @ Adamsville	41-78	8.01	0.05
01111400	Chepachet River @ Chepachet	66-72	17.4	2.23
01112700	Blackstone River Tributary @ Woonsocket	67-74	2.22	NA
01115100	Mosquitohawk Brook Near North Scituate	67-74	3.06	NA
01115630	Nooseneck River @ Nooseneck	65-81	8.23	1.27
01115770	Carr River Near Nooseneck	65-79	6.73	0.66
01116300	Furnace Hill Brook @ Cranston	67-74	4.19	NA
01117600	Meadow Brook Near Carolina	67-74	5.53	0.11
01126200	Bucks Horn Brook @ Greene	67-74	5.52	0.50

¹7Q10 based on data through Water Year 1993.

²7Q10 based on data through Water Year 1985.

*Affected by stream flow regulation.

**Affected by groundwater pumpage.

= Station installed in 1987, statistics based on four (4) years of record.

NA = Not Available - Statistics will not compute if flow is zero (0) on any day. These streams go dry occasionally during periods of low flow.