STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

OFFICE OF COMPLIANCE & INSPECTION

IN RE: Town of Bristol **FILE NO.: OCI-WP-17-13**
X-ref. RIPDES Permit RI0100005

NOTICE OF VIOLATION

A. Introduction

Pursuant to Sections 42-17.1-2(21) and 42-17.6-3 of the Rhode Island General Laws, as amended, ("R.I. Gen. Laws") you are hereby notified that the Director of the Department of Environmental Management (the "Director" of "DEM") has reasonable grounds to believe that the above-named party ("Bristol") has violated certain statutes and/or administrative regulations under the DEM's jurisdiction.

B. Administrative History

The DEM has issued several written notices to Bristol for some of the violations that are the subject of this Notice of Violation ("NOV"). Specifically, notices were issued on 7 June 2010, 7 March 2013 and 11 February 2015. Each notice required specific actions to correct the violations. In response, Bristol took some actions to address the violations. The DEM has also notified Bristol of the violations in person, by telephone and through electronic correspondence. As of the date of the NOV, Bristol has not resolved the violations that are the subject of the NOV.

C. Facts

(1) Bristol owns and operates a wastewater treatment facility located at Plant Avenue in the town of Bristol, Rhode Island (the "Facility").

(2) On 6 August 1990, the DEM approved an operation and maintenance ("O&M") plan that was submitted by BETA Engineering ("BETA") on behalf of Bristol for the Facility (the "Facility O&M Plan").

(3) The Facility O&M Plan states that the Facility is staffed 8 hours per day Monday through Friday and 4 hours per day on Saturday and Sunday (the "Staffing Schedule").

(4) On 18 March 2011, the DEM issued to Bristol Rhode Island Pollutant Discharge Elimination System ("RIPDES") Permit No. RI0100005 (the "2011 Permit").

(5) The 2011 Permit authorized Bristol to discharge 3.79 million gallons per day ("MGD") of treated wastewater (the "Design Flow") from the Facility to Bristol Harbor.

(6) A portion of Bristol Harbor is classified under the DEM's *Water Quality Regulations* as SA or SA{b}. These waters are designated for shellfish harvesting for direct human consumption (the "Bristol Harbor Shellfishing Waters") and primary and secondary contact recreational activities, and fish and wildlife habitat; however, seasonal shellfish closures are enacted in SA{b} waters due to concentration of vessels. Despite these seasonal shellfish closures, SA{b} waters must attain all SA water criteria.

(7) The 2011 Permit became effective on 1 May 2011.

(8) The 2011 Permit required Bristol to:

(a) Comply with all conditions of the permit;

(b) Comply with the following discharge limits for fecal coliform bacteria: maximum daily and maximum weekly average of 400 most probable number per 100 milliliters ("MPN/100 ML") (the "Bacteria Limits");

(c) Comply with the following discharge limit for *Mysidopsis Bahia* LC50: maximum daily >or=100% (the "Toxicity Limit");

(d) Take all reasonable steps to minimize or prevent any discharge in violation of the permit which has a reasonable likelihood of adversely affecting human health or the environment;

(e) At all times, properly operate and maintain all facilities to provide treatment prior to discharge to the receiving water;

(f) Properly operate and maintain all components of the Facility to achieve compliance with the conditions of the permit;

(g) Immediately report any violation or non-compliance which may endanger health or the environment, including maximum daily and maximum weekly average discharge limitation violations;

(h) Summarize monitoring results obtained during the previous month and report these results to the DEM in a Discharge Monitoring Report ("DMR") that must be postmarked no later than the 15th day of the month following the completed reporting period; and

(i) Continuously operate a total residual chlorine ("TRC") analyzer/recorder after effluent chlorination and prior to effluent de-chlorination to provide a record that proper effluent chlorination is achieved always.

(9) On 9 September 2016, the DEM issued to Bristol RIPDES Permit No. RI0100005 (the "2016 Permit").

(10) The 2016 Permit authorized Bristol to discharge treated wastewater from the Facility to Bristol Harbor.

(11) The 2016 Permit became effective on 1 October 2016.

(12) The 2016 Permit replaced the Bacteria Limits with a requirement to monitor for fecal coliform bacteria and to immediately report to the DEM any result that

exceeds 400 MPN/100 ML. All the other 2011 Permit requirements described above are in the 2016 Permit.

(13) The State of Rhode Island is a member of the Interstate Shellfish Sanitation Conference ("ISSC") and has agreed to abide by and enforce a model ordinance titled "NSSP Guide for the Control of Molluscan Shellfish" (the "Ordinance") as the requirements that are minimally necessary for the sanitary control of molluscan shellfish to ensure that shellfish grown, processed and shipped from Rhode Island are safe for direct human consumption and can be sold for interstate commerce. The Ordinance includes, but is not limited to, the following requirements:

(a) That the DEM classify all waters in Rhode Island as Approved, Conditionally Approved, Prohibited, Conditionally Restricted or Restricted to shellfish harvesting;

(b) That the DEM immediately (within 24 hours) close to shellfish harvesting any waters that are subject to a discharge of partially treated or untreated wastewater from a wastewater treatment facility;

(c) That for the discharge of partially treated wastewater, the waters must remain closed to shellfish harvesting until fecal coliform bacteria meet the bacteriological standards established in the Ordinance for Class SA water quality standards; and

(d) That for the discharge of raw untreated wastewater discharged from a large community wastewater collection system or wastewater system discharge, the waters must remain closed to shellfish harvesting for 21 days OR until shellfish tissue samples meet male specific coliphage ("MSC") of <50 plaque forming units per 100 grams ("PFU/100 g").

Chlorination System

(14) On 31 August 1998, the DEM approved an amendment to the Facility O&M Plan titled "Operations and Maintenance Manual Update Chlorination/Dechlorination System" that was submitted by BETA on behalf of Bristol (the "Chlorination O&M Plan"). The Chlorination O&M Plan states the following:

(a) A TRC of 0.75 milligrams per liter ("mg/L") at the end of the chlorine contact tank ("CCT") prior to dechlorination is required to meet the Bacteria Limits; and

(b) At the Design Flow a TRC of 3.65 mg/L at the head of the CCT and a chlorine feed rate of 115 pounds per day is required.

(15) On 12 April 2010, the DEM inspected the Facility and reviewed records maintained at the Facility and DMRs. The inspection and review of records revealed the following:

(a) Records from 2 March 2010 through 14 March 2010 and from 8 April 2010 through 12 April 2010 showed that:

(i) 44 grab samples were collected and analyzed for TRC at the head of the CCT. Of these, 43 were <3.65 mg/L, 25 were <0.5 mg/L and 1 was 0.0 mg/L;
(ii) 44 grab samples were collected and analyzed for TRC at the end of the CCT prior to dechlorination. Of these, 40 were <0.75 mg/L and 4 were 0.0 mg/L; and

(b) Records for January 2010 and March 2010 showed that:

(i) For January 2010, the average daily flow and average chlorine feed rate for the month was 3.69 MGD (close to the Design Flow) and 56 pounds per day, respectively; and
(ii) On 6 March 2010, the flow was 4.4 MGD and the chlorine feed rate was 39 pounds. This is the same day that the TRC at the head of the CCT and at the end of the CCT prior to dechlorination were 0.0 mg/L.

(16) On 7 December 2012, the DEM received electronic correspondence from James Dyment ("Dyment") from BETA on behalf of Bristol. The correspondence included a 1 page record of sample results for TRC for the month of October 2012. The correspondence stated that:

(a) Sodium bisulfite tends to mix upstream into the CCT at times resulting in the TRC analyzer/recorder reading 0.0 mg/L when a chlorine residual is present;

(b) Facility operators take 3 grab samples per day at the end of the CCT prior to dechlorination to measure TRC; and

(c) On 29 October 2012, the grab samples that were collected and analyzed for TRC were at least 0.52 mg/L for each sample.

The record showed that for 29 October 2012, the grab samples were 0.52 mg/L, 0.64 mg/L and 0.74 mg/L and the TRC analyzer/recorder readings taken at the same time as the grab samples were 0.09 mg/L, 0.31 mg/L and 0.51 mg/L, respectively.

(17) On 23 October 2012, 6 February 2013 and 28 March 2013, the DEM inspected the Facility and reviewed records maintained at the Facility and DMRs. The inspections and review of records revealed the following:

(a) Grab samples collected at the head of the CCT show that the TRC occasionally is <0.5 mg/L;

(b) For calendar year 2012, it appeared that none of the fecal coliform bacteria samples that were collected and analyzed were at a time when the TRC at the head of the CCT was <0.5 mg/L; and

(c) On 28 March 2013, at the time of the Facility inspection, Dyment stated that the TRC analyzer/recorders were unreliable. The DEM inspector suggested to Dyment that he research other manufacturers and reminded Dyment and the Facility staff present that the 2011 Permit requires continuous recording of TRC prior to dechlorination.

(18) On 23 April 2014, Bill Rabideau ("Rabideau"), the Facility laboratory chemist, verbally reported to the DEM that the flash mixer (the "Flash Mixer") failed the previous Wednesday and that Facility operators set up a manual system (consisting of a pump and hoses) to mix and circulate the chlorine (the "Manual Chlorine Feed System"). Rabideau stated that chlorination did not cease and the TRC was not affected.

(19) On 2 September 2014, Rabideau verbally reported to the DEM a fecal coliform bacteria violation. Rabideau stated that the Flash Mixer was not operational and that Facility operators set up the Manual Chlorine Feed System.

(20) The DEM reviewed the DMRs submitted by Bristol for 2014. Bristol reported the following results that exceeded the Bacteria Limits:

PERIOD	DAILY MAXIMUM (MPN/100 ML)	WEEKLY AVERAGE (MPN/100 ML)
30 March 2014	2420	
31 March 2014	24,000,000	
1 April 2014	24,000,000	
2 April 2014	649	
3 April 2014	770	
April 2014		795
31 August 2014	613	
2 September 2014	687	
7 September 2014	687	
September 2014		479

26 October 2014	613	
30 November 2014	2,420	

(21) On 14 January 2015, the DEM inspected the Facility and spoke with Jose DaSilva ("DaSilva"), superintendent of the Facility, and Rabideau at the time of the inspection. DaSilva and Rabideau attributed the recent high fecal coliform bacteria results on operator sampling error. The DEM agent informed DaSilva and Rabideau that, in his opinion, it was not operator sampling error, but the failure of the chlorination system to supply an adequate chlorine dosage.

(22) On 13 March 2015 and 16 March 2015, Bristol verbally reported to the DEM daily maximum fecal coliform bacteria results of >2,400 MPN/100 ML on 12 March 2015 and 15 March 2015.

(23) On 17 March 2015, at sunrise, because of the exceedances on 12 March 2015 and 15 March 2015, the DEM enacted a shellfish closure within the Bristol Harbor Shellfishing Waters.

(24) On 18 March 2015, the DEM received the results of water samples collected within Bristol Harbor by the DEM on 17 March 2015. The results showed acceptable bacteria levels in the water samples (the "March 17th Tests").

(25) On 19 March 2015, at sunrise, based on the March 17th Tests, the DEM reopened the Bristol Harbor Shellfishing Waters to shellfishing.

(26) On 1 April 2015, DaSilva and Dyment informed the DEM in a telephone conversation that they:

(a) Figured out how to set a minimum pump speed on the chlorine pump to prevent the chlorine feed rate from dropping too low;

(b) Started this yesterday and the TRC held up overnight; and

(c) Feel this will address the immediate issues with the fecal coliform bacteria violations.

(27) On or about 17 April 2015, the DEM received a letter from BETA on behalf of Bristol (the "April 2015 Letter"). The letter stated the following:

(a) The existing chlorine dosage control system was recently modified to allow the Facility operators to set a minimum chlorine dosage set point (the "Chlorine Dosage Procedure");

(b) The operators raise this minimum dosage setpoint during high flows to introduce chlorine more than what the control system would normally dose; and

(c) This practice uses excess chemicals (both chlorine for disinfection and sodium bisulfite for dechlorination), but insures adequate disinfection.

(28) The DEM reviewed the DMRs submitted by Bristol for 2015. Bristol reported the following results that exceeded the Bacteria Limits:

PERIOD	DAILY MAXIMUM (MPN/100 ML)	WEEKLY AVERAGE (MPN/100 ML)
12 March 2015	24,000,000	
15 March 2015	24,000,000	
29 March 2015	504	
March 2015		1,521 (week 2) 1,950 (week 3)
11 August 2015	517	
24 December 2015	548	

(29) On 15 January 2016, DaSilva verbally reported to the DEM a fecal coliform bacteria violation. DaSilva stated that the Flash Mixer failed and that Facility operators set up the Manual Chlorine Feed System. DaSilva also stated that the Facility used to have a backup mixer and spare parts inventory, but no longer have them due to budget constraints.

(30) The DEM reviewed the DMRs submitted by Bristol for January 2016 and February 2016. Bristol reported the following results that exceeded the Bacteria Limits:

PERIOD	DAILY MAXIMUM (MPN/100 ML)	WEEKLY AVERAGE (MPN/100 ML)
14 January 2016	436	
7 February 2016	1203	
9 February 2016	2420	

(31) On 8 February 2016, the DEM sent electronic correspondence to DaSilva. The correspondence stated the following:

(a) There is a strong possibility that the failure of the Flash Mixer and the use of the Manual Chlorine Feed System may have caused the exceedance of the Bacteria Limits on 7 February 2016;

(b) Bristol has not yet ordered a new mixer and the lead time is 6 to 8 weeks;

(c) Bristol must expedite the purchase of the new mixer and the needed spare parts at the Facility to keep the mixer operational always;

(d) The Facility O&M Manual requires that necessary spare parts be maintained at the Facility, particularly those that are critical or have long lead times; and

(e) Bristol is required to submit a plan and schedule to the DEM to expedite the purchase of the new mixer and spare parts by 12 February 2016.

(32) On 10 February 2016, the DEM sent electronic correspondence to DaSilva requiring the Facility to test for fecal coliform bacteria daily and to report the results to the DEM daily until further notice.

(33) On 18 February 2016, the DEM sent electronic correspondence to DaSilva. The correspondence stated the following:

(a) The DEM reviewed TRC at the time fecal coliform bacteria samples were taken;

(b) The Facility achieves good fecal coliform bacteria results when the TRC prior to dechlorination is 1.0 mg/l or greater;

(c) Most of the previous samples that resulted in exceedances of the Bacteria Limits were taken when the TRC prior to dechlorination was <0.5 mg/L; and

(d) The DEM was requiring the Facility to target a TRC of 1.0 mg/L or greater prior to dechlorination.

(34) The DEM reviewed the DMRs submitted by Bristol for May 2016. Bristol reported the following results that exceeded the Bacteria Limits:

PERIOD	DAILY MAXIMUM (MPN/100 ML)	WEEKLY AVERAGE (MPN/100 ML)
8 May 2016	2,400,000	
30 May 2016	706,835	
May 2016		2724

(35) On 10 June 2016 and 24 June 2016, Bristol submitted written reports to the DEM regarding a chlorination system failure at the Facility (the "June Reports"). The reports included the following information:

(a) The failure began at approximately 11:30 PM on 29 May 2016;

(b) The failure was discovered by a Facility operator at approximately 5:15 AM on 30 May 2016 and the DEM was verbally notified at that time;

(c) The failure was caused by a break in a chlorine feed line;

(d) The system was repaired at approximately 6:50 AM on 30 May 2016;

(e) The failure resulted in an estimated discharge of approximately 763,900 gallons of wastewater to the Bristol Harbor without chlorination;

(f) Three successive hourly effluent samples collected and analyzed for fecal coliform bacteria beginning at 6:00 AM had results of greater than 2,420 MPN/100 ML, greater than 2,420 MPN/100 ML, and 613 MPN/100 ML;

(g) The chlorination system did not generate an alarm to alert Facility staff of the failure;

(h) The alarm was tested and is operable; and

(i) A review of the system revealed that the alarm set point was 350, but the actual level never fell below 380.

(36) The DEM review of the June Reports and discussions with Facility staff revealed the following:

(a) The alarm set point for the system was originally 400 or higher;

(b) DaSilva reduced the set point to 350 because of frequent nuisance alarms;

(c) After this failure, DaSilva raised the set point to 500; and

(d) The TRC analyzer/recorder at the end of the CCT prior to dechlorination cannot be used to generate alarms because it is unreliable (for the reason noted in Fact 15 (a) above).

(37) On 19 July 2016 and on 22 July 2016, Bristol submitted written reports to the DEM regarding 2 separate chlorination system failures at the Facility (the "July Reports"). The reports included the following information:

(a) At approximately 3:30 PM on 15 July 2016 a thunderstorm caused an electrical surge that damaged the chlorine feed pump;

(b) The system was restored at approximately 4:30 PM on 15 July 2016;

(c) At approximately 8:00 PM on 15 July 2016 a plant wide power outage caused a second failure;

(d) The emergency backup chlorine pump (the "Emergency Pump") was not connected to the backup generator and was therefore inoperable;

(e) The Emergency Pump was manually connected to the generator and the system was restored at approximately 9:15 PM on 15 July 2016;

(f) The failures resulted in an estimated discharge of 456,033 gallons of wastewater to Bristol Harbor without adequate chlorination; and

(g) The DEM was verbally notified of the failures on 19 July 2016.

(38) On 26 July 2016, the DEM inspected the Facility and spoke with DaSilva. The DEM agent suggested to DaSilva that the location of the sodium bisulfite feed be moved to address the issue noted in Fact 16 (a) above. DaSilva stated that he would discuss this suggestion with BETA.

(39) The DEM review of the July Reports and discussions with Facility staff revealed the following:

(a) The Facility does not have accurate records of TRC at the end of the CCT prior to dechlorination (for the reason noted in Fact 16 (a) above); and

(b) There are no available reliable records to determine whether there was sufficient TRC at the end of the CCT with the Emergency Pump in service.

(40) The DEM reviewed the DMRs submitted by Bristol for July 2016 through September 2016. Bristol reported the following results that exceeded the Bacteria Limits:

PERIOD	**DAILY MAXIMUM (MPN/100 ML)** [1]
17 July 2016	489
9 August 2016	687
29 September 2016	1203

[1] As of 1 October 2016, the Bacteria Limits were no longer in effect

(41) On 16 November 2016, the DEM inspected the Facility. The inspection revealed that the bisulfite feed was moved to the downstream side of the weirs on the CCTs; however, the TRC analyzer was still providing inaccurate readings.

(42) The DEM reviewed the DMRs submitted by Bristol for April 2017. Bristol reported the following result that exceeded the reporting limit for fecal coliform bacteria:

PERIOD	**DAILY MAXIMUM (MPN/100 ML)**
6 April 2017	19,596

(43) On 8 August 2017, a DEM agent spoke with Dyment. Dyment stated the following:

(a) Bristol is moving forward with plans to upgrade the chlorination system in 2 phases;

(b) Phase 1 involves replacement of the current TRC analyzers with new equipment that will generate alarms and is more reliable (but will not be used for chlorination control);

(c) Phase 2 involves updates to the control system; and

(d) The Phase 1 improvements will begin soon.

(44) The Chlorine Dosage Procedure requires the presence of operators at the Facility.

(45) The Staffing Schedule is currently in place and has been in place for all times relevant to the NOV.

Facility Flooding

(46) On 30 March 2014 through 1 April 2014, approximately 7 inches of rain fell in Bristol.

(47) On 31 March 2014, Bristol verbally reported to the DEM that because of the rainfall, storm water flooded the Facility and flowed into the CCTs causing the tanks to surcharge.

(48) Photographs submitted by Bristol to the DEM of the Facility during the flooding showed the following:

(a) The rotating biological contactor ("RBC") drive motors were submerged;

(b) Flood waters entering the primary clarifiers;

(c) Flood waters entering the Flash Mixer chamber; and

(d) A Facility operator opening a valve to bypass wastewater around the Facility's secondary treatment system.

(49) On 29 October 2015, the DEM received electronic correspondence from BETA on behalf of Bristol that included a draft Environmental Assessment ("EA") to improve the storm water drainage at the Facility (the "Drainage Improvements"). The EA stated the following:

(a) Stormwater flows toward the RBC tanks and the chlorination system;

(b) Past storm events have resulted in inundation of the Facility;

(c) The RBC drive motors have been submerged and have failed during past flooding conditions;

(d) The RBC tanks are being replaced, and the new equipment is being installed with the drive motors located approximately 2.5 feet higher than the existing drive motors to provide more reliable operation and treatment if flooding occurs; and

(e) The Drainage Improvements will mitigate the encroachment of overland stormwater flow along the southern boundary of the Facility and reduce flooding within the Facility.

(50) On 6 July 2016, BETA applied to the Coastal Resources Management Council ("CRMC") on behalf of Bristol to construct the Drainage Improvements (the "Application").

(51) On 27 September 2016, the DEM approved the EA for the Drainage Improvements.

(52) On 19 January 2017, the CRMC approved the Application (the "Assent").

(53) On 10 March 2017, a DEM agent spoke with Chris Cronin ("Cronin") at BETA regarding the schedule to complete the work for the Drainage Improvements. Cronin stated that Bristol was postponing the work due to funding issues.

O&M Plans

(54) On 22 December 2006, the DEM approved Bristol's plans to replace existing chlorination equipment at the Facility with new chlorination equipment, which was later installed by Bristol.

(55) On or about 2012, Bristol began replacing the RBC tanks at the Facility in accordance with the schedule included in the EA, which shows that all 24 RBC tanks will be replaced by 2020. Through 2015, Bristol replaced 16 tanks.

(56) On or before 2014, Bristol began using the primary clarifiers to settle solids and between 1 October 2014 and 26 July 2016 Bristol ceased operating the sludge blending tanks.

(57) On or about 2016, Bristol replaced existing preliminary treatment equipment at the Facility with new preliminary treatment equipment.

(58) As of the date of the NOV, Bristol has not submitted to the DEM a new draft O&M plan, or draft revisions to the Facility O&M Plan, for the O&M of the new chlorination equipment, the new RBC tanks, the new process for treating solids, the new preliminary treatment equipment, or the Chlorine Dosage Procedure.

Toxicity

(59) Bristol reported the following monitoring results to the DEM on the DMRs that exceed the discharge limits for *Mysidopsis Bahia* LC50 as set forth in the 2011 Permit:

PERIOD	DAILY MAXIMUM
September 2014	61.6%
December 2014	75.2%

(60) On or about 27 February 2015, the DEM received a letter from BETA on behalf of Bristol. The letter stated the following:

(a) The Facility uses the primary clarifiers to co-settle waste and primary sludge;

(b) During low flows, the Facility has had difficulty with sludge removal from the primary clarifiers, resulting in increased solids retention time ("SRT") within the clarifiers;

(c) Excessive SRT can cause septic conditions resulting in ammonia release, sulfide production and gasification within the sludge blankets;

(d) Both the ammonia and sulfides contribute to overloading of the RBC tanks resulting in filamentous bacteria growth;

(e) The gasification compounds the issue causing the sludge blankets to "thin" and become difficult to pump and dewater;

(f) Taking a primary clarifier off-line will reduce the volume available to settle primary sludge and increase the loading to the RBC tanks;

(g) During the summer months, the RBC tanks are clearly overloaded based on the presence of filamentous bacteria growth; and

(h) BETA concurs with the Facility's current approach of using polymer addition at the primary clarifier influent to improve sludge settling within the clarifiers and assist with sludge pumping to the belt filter presses.

(61) On 28 July 2015, BETA submitted to the DEM on behalf of Bristol a standard operating procedure for the addition of polymer during low flows (the "Low Flow Polymer Dosage SOP").

(62) On 28 July 2015, the DEM approved the Low Flow Polymer Dosage SOP.

(63) Bristol reported the following monitoring result to the DEM on the DMR that exceed the discharge limits for *Mysidopsis Bahia* LC50 as set forth in the 2011 Permit (the "Exceedance"):

PERIOD	DAILY MAXIMUM
September 2016	93.9%

(64) The letter from Bristol that accompanied the DMR for September 2016 stated the following:

(a) Bristol has no plausible explanation for the Exceedance;

(b) The flow was approximately one half the normal flow;

(c) The low flows were causing the Facility to de-nitrify and as a result solids were floating in the CCT; and

(d) It was felt that some solids were collected in the sample and that contributed to the Exceedance.

Kickemuit Pumping Station Wastewater Overflow

(65) On 26 June 2014, Bristol verbally reported to the DEM that a maximum volume of 10,000 gallons of untreated wastewater had been discharged from the wastewater pumping station on Kickemuit Avenue to the surface of the ground and ultimately to Kickemuit River (the "Overflow") because of a crack in the sewer force main valve at the station.

(66) Kickemuit River is classified under the DEM's *Water Quality Regulations* as SA and SA{b}. These waters are designated for shellfish harvesting for direct human consumption and primary and secondary contact recreational activities, and fish and wildlife habitat. Seasonal shellfish closures are enacted in SA{b} waters due to concentration of vessels.

(67) A portion of Kickemuit River is classified by the DEM as Conditionally Approved for shellfish harvesting in accordance with the Ordinance (the "Kickemuit Conditionally Approved Waters"). Waters classified as Conditionally Approved are subject to periodic shellfish closures caused by high fecal coliform bacteria levels following precipitation events.

(68) Kickemuit River does not meet its assigned water quality designation for shellfish harvesting for direct human consumption according to the most recent DEM report of impaired waters entitled "STATE OF RHODE ISLAND 2014 303(d) LIST OF IMPAIRED WATERS FINAL May 2015". Its classification as Conditionally Approved is because of this impairment.

(69) On 27 June 2014, because of the Overflow, the DEM enacted a shellfish closure within Kickemuit Conditionally Approved Waters (the "Shellfish Closure") and the Department of Health ("DOH") issued an advisory to refrain from contact recreation along Kickemuit River (the "Recreation Contact Advisory").

(70) On 1 July 2014, the DEM received the results of water samples and shellfish tissue samples collected within Kickemuit River by the DEM on 30 June 2014. The results showed acceptable bacteria levels in the water samples, but unacceptable levels of MSC >125 PFU/100 g in the shellfish tissue samples (the "June 30th Tests").

(71) On 1 July 2014, based on the June 30th Tests, the DOH lifted the Recreation Contact Advisory.

(72) On 2 July 2014, the DEM inspected the station and spoke with DaSilva at the time of the inspection. DaSilva informed the DEM that he allowed the repair contractor to discharge approximately 100 to 200 gallons of wastewater treated with chlorine to the surface of the ground (Kickemuit Avenue) during repair of the sewer force main on 26 June 2014.

(73) On 2 July 2014, Bristol submitted a written report to the DEM regarding the Overflow. The report included the following information:

(a) It is difficult to determine how long the Overflow was ongoing because the Facility operator last inspected the station the previous day and there was some precipitation the night before;

(b) A worst-case estimate of 10,000 gallons was reported; and

(c) Upon further review, it is believed the Overflow was < 1,000 gallons.

(74) On 3 July 2014, the DEM received the results of shellfish tissue samples collected from 3 locations within Kickemuit River by the DEM on 2 July 2014. The results showed the following unacceptable levels of MSC: 68; 164 and 496.

(75) On 11 July 2014, the DEM received the results of shellfish tissue samples collected from 2 locations within Kickemuit River by the DEM on 10 July 2014. The results showed the following unacceptable levels of MSC: 68.6 and 88.

(76) On 23 July 2014, the DEM received the results of shellfish tissue samples collected from 3 locations within Kickemuit River by the DEM on 21 July 2014. The results showed the following acceptable levels of MSC: <1; 6 and 10 (the "July 21st Tests").

(77) On 24 July 2014, at sunrise, based on the July 21st Tests, the DEM lifted the Shellfish Closure.

D. Violation

Based on the foregoing facts, the Director has reasonable grounds to believe that you have violated the following statutes and/or regulations:

(1) **R.I. Gen. Laws Section 46-12-5(b)** – requiring the discharge of any pollutant into waters of the State comply with the terms and conditions of a permit and applicable regulations.

(2) **DEM's *Water Quality Regulations***

(a) **Rule 9(A)** – prohibiting the discharge of pollutants into any waters of the State or any activity alone or in combination which the Director determines will likely result in the violation of any State water quality criterion or interfere with one or more of the existing or designated uses assigned to the receiving waters.

(b) **Rule 9(B)** – prohibiting anyone from discharging pollutants into waters of the State, or perform activities alone or in combination which will likely result in the additional degradation of water quality of the receiving waters or downstream waters which are already below the water quality standard.

(c) **Rule 11(B)** – requiring that the discharge of pollutants into the waters of the State comply with the terms and conditions of a permit issued by the DEM.

(d) **Rule 16(A)** – mandating compliance with all terms, conditions, management practices and operation and maintenance requirements set forth in a permit.

(3) **DEM's *Regulations for the Rhode Island Pollutant Discharge Elimination System* (the "RIPDES Regulations")**

(a) **Rule 14.02(a)** – requiring the permittee to comply with all conditions of the permit.

(b) **Rule 14.05** – requiring the permittee to take all reasonable steps to minimize or prevent a discharge in violation of the permit.

(c) **Rule 14.06** – requiring the permittee to maintain in good working order and operate as efficiently as possible all treatment works to achieve compliance with the permit.

(d) **Rule 14.18** – requiring the permittee to immediately report any violation or noncompliance which may endanger health or the environment, including maximum daily discharge limitation violations.

(4) **DEM's *Rules and Regulations Pertaining to the Operation and Maintenance of Wastewater Treatment Facilities* (the "O&M Regulations")**

(a) **Rule 5(A) (recently amended to Part 4.5A)** – requiring that the owner operate and maintain the wastewater treatment facility in good working order and as efficiently as possible; and requiring the owner of the wastewater treatment facility to verbally report power outages and equipment failure within 24 hours of discovery of the event.

(b) **Rule 5(C) (recently amended to Part 4.5C)** – requiring the owner of the wastewater treatment facility that is being upgraded to submit a draft O&M Plan or draft revisions to an existing approved O&M Plan to the DEM for review and approval at least 60 days prior to the operation of the new or upgraded wastewater treatment facility.

(c) **Rule 7(A) (recently amended to Part 4.7A)** – requiring that the wastewater treatment facility be operated and maintained always in accordance with the approved O&M Plan.

E. Order

Based upon the violations alleged above and pursuant to R.I. Gen. Laws Section 42-17.1-2(21), you are hereby ORDERED to:

(1) **Within 30 days of receipt of the NOV**, submit a plan (and schedule) to the DEM for the continuous operation of the Flash Mixer that includes, but is not limited to, maintaining adequate spare parts to repair/replace the mixer should it fail and/or modification of the mixer design to make the system more reliable.

(2) **Within 60 days of receipt of the NOV,** submit design plans and specifications (and schedule) to the DEM for the chlorination system that includes, but is not limited to, the following:

(a) Control system that paces chlorine dosage based on chlorine residual. The new system shall include new TRC analyzers located post-and pre dechlorination, equipment and programming necessary to allow the predechlorination analyzer to pace chlorine dosage based on chlorine residual set points, and an alarm system to allow the analyzers to generate and communicate low and high chlorine residual alarms;

(b) Additional redundancy for the chlorination pumps and a control system for automatically switching of pumps in the event of a pump failure; and

(c) Modifications to the installation of the TRC analyzer at the head of the chlorine contact tanks to allow the analyzer to be operated year-round and provide chlorine residual alarms set points in the SCADA system.

(3) **Within 60 days of receipt of the NOV,** submit an O&M Plan to the DEM for the entire Facility.

(4) **Within 60 days of receipt of the NOV,** complete and submit to the DEM a study of the funding mechanisms dedicated to wastewater collection and treatment utilities considering needs to meet the requirements herein and to otherwise operate and maintain the facility in accordance with the DEM's O&M Regulations and other appropriate regulations. The study must analyze the true costs of operation and maintenance, including adequate staffing and training, and how revenue is allocated to provide for current and projected operations, maintenance, and staffing expenses. The analysis shall include an evaluation of staffing levels and organization.

(5) **Within 180 days of receipt of the NOV,** return all sludge handling equipment into service, including the gravity thickener and sludge blending tanks, and operate the equipment in accordance with the Facility O&M Plan.

(6) **Within 180 days of receipt of the NOV,** complete all work associated with the Drainage Improvements in accordance with the EA and the Assent.

(7) The submittals required above shall be subject to the DEM's review and approval. Upon review, the DEM shall provide written notification to Bristol either granting formal approval or stating the deficiencies therein. Within 14 days (unless a longer time is specified) of receiving a notification of deficiencies in any of the required submittals, Bristol must submit to the DEM a modified proposal or additional information necessary to correct the deficiencies.

F. Penalty

(1) Pursuant to R.I. Gen. Laws Section 42-17.6-2, the following administrative penalty, as more specifically described in the attached penalty summary and worksheets, is hereby ASSESSED, jointly and severally, against each named respondent:

$163,750

(2) The proposed administrative penalty is calculated pursuant to the DEM's *Rules and Regulations for Assessment of Administrative Penalties*, as amended, and must be paid to the DEM within 30 days of your receipt of the NOV. Payment shall be in the form of check made payable to the "General Treasury - Water & Air Protection Program Account" and shall be forwarded to the DEM Office of Compliance and Inspection, 235 Promenade Street, Suite 220, Providence, Rhode Island 02908-5767.

(3) Penalties assessed against Bristol in the NOV are penalties payable to and for the benefit of the State of Rhode Island and are not compensation for actual pecuniary loss.

(4) If any violation alleged herein shall continue, then each day during which the violation occurs or continues shall constitute a separate offense and the penalties and/or costs for that violation shall continue to accrue in the manner set forth in the attached penalty summary and worksheets. The accrual of additional penalties and costs shall be suspended if the DEM determines that reasonable efforts have been made to comply promptly with the NOV.

G. Right to Administrative Hearing

(1) Pursuant to R.I. Gen. Laws Chapters 42-17.1, 42-17.6, 42-17.7 and 42-35, each named respondent is entitled to request a hearing before the DEM's Administrative Adjudication Division regarding the allegations, orders and/or penalties set forth in Sections B through F above. All requests for hearing MUST:

(a) Be in writing. See R.I. Gen. Laws Sections 42-17.1-2(21)(i) and 42-17.6-4(b);

(b) Be **RECEIVED** by the DEM's Administrative Adjudication Division, at the following address, within 20 days of your receipt of the NOV. See R.I. Gen. Laws Sections 42-17.1-2(21)(i) and 42-17.7-9:

Administrative Clerk
DEM - Administrative Adjudication Division
235 Promenade Street, Room 350
Providence, RI 02908-5767

(c) Indicate whether you deny the alleged violations and/or whether you believe that the administrative penalty is excessive. See R.I. Gen. Laws Section 42-17.6-4(b); **AND**

(d) State clearly and concisely the specific issues which are in dispute, the facts in support thereof and the relief sought or involved, if any. See Part 1.7(B) of the DEM's *Administrative Rules of Practice and Procedure for the Administrative Adjudication Division for Environmental Matters*.

(2) A copy of each request for hearing must also be forwarded to:

Tricia Quest, Esquire
DEM - Office of Legal Services
235 Promenade Street, 4TH Floor
Providence, RI 02908-5767

(3) Each named respondent has the right to be represented by legal counsel at all administrative proceedings relating to this matter.

(4) Each respondent must file a separate and timely request for an administrative hearing before the DEM's Administrative Adjudication Division as to each violation alleged in the written NOV. If any respondent fails to request a hearing in the above-described time or manner regarding any violation set forth herein, then this NOV shall automatically become a Final Compliance Order enforceable in Superior Court as to that respondent and/or violation and any associated administrative penalty proposed in the NOV shall be final as to that respondent. See R.I. Gen. Laws Sections 42-17.1-2(21)(i) and (vi) and 42-17.6-4(b) and (c).

(5) Failure to comply with the NOV may subject each respondent to additional civil and/or criminal penalties.

(6) The NOV does not preclude the Director from taking any additional enforcement action nor does it preclude any other local, state, or federal governmental entities from initiating enforcement actions based on the acts or omissions described herein.

If you have any legal questions, you may contact (or if you are represented by an attorney, please have your attorney contact) Tricia Quest of the DEM's Office of Legal Services at (401) 222-6607. All other inquiries should be directed to David E. Chopy of the DEM's Office of Compliance and Inspection at (401) 222-1360 ext. 7400.

Please be advised that any such inquiries do not postpone, eliminate, or otherwise extend the need for a timely submittal of a written request for a hearing, as described in Section G above.

FOR THE DIRECTOR

By: _____
David E. Chopy, Chief
Office of Compliance and Inspection

Dated:_____

CERTIFICATION

I hereby certify that on the _____ day of _____ the within Notice of Violation was forwarded to:

Town of Bristol
c/o Steven Contente, Town Administrator
10 Court Street
Bristol, RI 02809-2208

by Certified Mail.

_____

ADMINISTRATIVE PENALTY SUMMARY

Program: OFFICE OF COMPLIANCE AND INSPECTION, Water Pollution
File Nos.: OCI-WP-17-13, X-ref RIPDES Permit RI0100005
Respondent: Town of Bristol

GRAVITY OF VIOLATION

SEE ATTACHED "PENALTY MATRIX WORKSHEETS."

VIOLATION No. & CITATION	APPLICATION OF MATRIX		PENALTY CALCULATION		AMOUNT
	Type	Deviation	Penalty from Matrix	Number or Duration of Violations	
D (1); D (2)(a), (c), &(d); D (3)(a), (b) & (c); D (4)(a) & (c) Bacteria Limits – June Through September	*Type I ($25,000 Max. Penalty) **	Moderate	$6,250	8 violations	$50,000
D (1); D (2)(c) &(d); D (3)(a), (b) & (c); D (4)(a) & (c) Bacteria Limits – October Through May	*Type I ($25,000 Max. Penalty) **	Minor	$2,500	13 violations	$32,500
D (1); D (2); D (3)(a), (b) & (c); D (4)(a) & (c) Bacteria Limits – March 2015	*Type I ($25,000 Max. Penalty) **	Moderate	$6,250	3 violations	$18,750
D (1); D (2)(a), (c) &(d); D (3)(a), (b) & (c); D (4)(a) & (c) Toxicity Limit	*Type I ($25,000 Max. Penalty) **	Moderate	$6,250	3 violations	$18,750
D (1); D (2); D (3)(a) & (b) Kickemuit Pumping Station Overflow	*Type I ($25,000 Max. Penalty) **	Moderate	$6,250	1 violation	$6,250
D (1); D(2)(c) &(d); D (3)(a), (b), & (c); D (4)(a) & (c) Chlorination System Failure – May 2016	*Type I ($25,000 Max. Penalty) **	Moderate	$6,250	1violation	$6,250
D (1); D (2)(c) & (d); D (3)(a), (b) & (c); D (4)(a) & (c) Chlorination System Failure – July 2016	*Type I ($25,000 Max. Penalty) **	Moderate	$6,250	1 violation	$6,250
D (1); D (2)(c) & (d); D (3)(a) & (d); D (4)(a) & (c) Reporting Of July 2016 Chlorination System Failure	*Type I ($25,000 Max. Penalty) **	Major	$25,000	1 violation	$25,000
				SUB-TOTAL	**$163,750**

***Maximum Penalties represent the maximum penalty amounts per day, per violation.**

ADMINISTRATIVE PENALTY SUMMARY (continued)

ECONOMIC BENEFIT FROM NONCOMPLIANCE

COSTS OF COMPLIANCE, EQUIPMENT, O&M, STUDIES OR OTHER DELAYED OR AVOIDED COSTS, INCLUDING INTEREST AND/OR ANY COMPETITIVE ADVANTAGE DERIVED OVER ENTITIES THAT COMPLY. NOTE: ECONOMIC BENEFIT MUST BE INCLUDED IN THE PENALTY UNLESS:

- **THERE IS NO IDENTIFIABLE BENEFIT FROM NONCOMPLIANCE; OR**
- **THE AMOUNT OF ECONOMIC BENEFIT CAN NOT BE QUANTIFIED.**

A review of the record in this matter has revealed that Bristol has either enjoyed no identifiable benefit from the noncompliance alleged in this enforcement action or that the amount of economic benefit that may have resulted cannot be quantified.

COST RECOVERY

ADDITIONAL OR EXTRAORDINARY COSTS INCURRED BY THE DIRECTOR DURING THE INVESTIGATION, ENFORCEMENT AND RESOLUTION OF AN ENFORCEMENT ACTION (EXCLUDING NON-OVERTIME PERSONNEL COSTS), FOR WHICH THE STATE IS NOT OTHERWISE REIMBURSED.

A review of the record in this matter has revealed that the DEM has not incurred any additional or extraordinary costs during the investigation, enforcement and resolution of this enforcement action (excluding non-overtime personnel costs), for which the State is not otherwise reimbursed.

TOTAL PENALTY PROPOSED UNDER PENALTY REGULATIONS= $163,750

PENALTY MATRIX WORKSHEET

CITATION: Bacteria Limits – June Through September

VIOLATION NO.: D (1); D (2)(a), (c), &(d); D (3)(a),(b) & (c); D (4)(a) & (c)

TYPE		
__X__ TYPE I DIRECTLY related to protecting health, safety, welfare or environment.	**____TYPE II** INDIRECTLY related to protecting health, safety, welfare or environment.	**____TYPE III** INCIDENTAL to protecting health, safety, welfare or environment.

DEVIATION FROM THE STANDARD

THE DEGREE TO WHICH A VIOLATION IS OUT OF COMPLIANCE WITH THE REQUIREMENT VIOLATED.

FACTORS CONSIDERED:

Taken from Part 1.10A.1.b of the DEM's *Rules and Regulations for Assessment of Administrative Penalties*

(1) **The extent to which the act or failure to act was out of compliance:** Bristol failed to comply with its discharge permit limits for fecal coliform bacteria resulting in partially disinfected wastewater discharge to waters of the State. Compliance with permit limits is a major objective of the DEM's RIPDES Regulations, the DEM's Water Quality Regulations, and the DEM's O&M Regulations and is of major importance to the regulatory program.

(2) **Environmental conditions:** The wastewater is discharged to an area of Bristol Harbor which is designated as a Class SB1 water body of the State. Class SB1 waters are designated for fish and wildlife habitat, primary and secondary contact recreational activities, and shall have good aesthetic value. However, primary contact recreational activities may be impacted due to pathogens from approved wastewater discharges.

(3) **Amount of the pollutant:** Considered, but not utilized for this calculation.

(4) **Toxicity or nature of the pollutant:** Partially disinfected wastewater can contain many kinds of bacteria, viruses, and parasites that can cause serious or fatal diseases in both humans and animals, as well as being the source of extremely objectionable odors.

(5) **Duration of the violation:** 8 permit exceedances of the daily maximum limit and 1 permit exceedance of the weekly average limit during June through September for 2014, 2015 and 2016, when maximum contact recreational activities within the waterbody are expected to occur. The DEM did not assess a penalty for the weekly average limit exceedance, as this may have been caused by the daily maximum limit exceedances.

(6) **Areal extent of the violation:** Considered, but not utilized for this calculation.

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(7) **Whether the person took reasonable and appropriate steps to prevent and/or mitigate the noncompliance:** Bristol failed to take reasonable and appropriate steps to prevent or mitigate the non-compliance. On 7 June 2010, the DEM issued a Notice of Deficiency (NOD) to Bristol for the issues with the chlorination system. The NOD required that Bristol submit a plan and schedule for modification of the TRC analyzer/recorder to allow operation always and to make the necessary adjustments to the high and low chlorine level alarms such that the Facility operators can be notified of any chlorination system failures. On 7 March 2013, the DEM issued a letter to Bristol for the continued issues with the chlorination system. The letter required specific actions to address the issues. The DEM has also notified Bristol of the issues with the chlorination system in person, by telephone and through electronic correspondence. In response, Bristol took some actions; however, Bristol has not fully complied with the actions required by the DEM.

(8) **Whether the person has previously failed to comply with any regulations, order, statute, license, permit or approval issued or adopted by the Department, or any law which the Department has the authority or responsibility to enforce:** Considered, but not utilized for this calculation.

(9) **The degree of willfulness or negligence, including but not limited to, how much control the violator had over the occurrence of the violation and whether the violation was foreseeable:** Bristol has full control over the Facility, the wastewater treatment equipment and processes.

(10) **Any other factor(s) that may be relevant in determining the amount of a penalty:** Considered, but not utilized for this calculation.

MAJOR	X MODERATE	MINOR

Penalty Matrix where the applicable statute provides for a civil penalty up to $25,000		**TYPE I**	TYPE II	TYPE III
DEVIATION FROM STANDARD	MAJOR	$12,500 to $25,000	$6,250 to $12,500	$2,500 to $6,250
	MODERATE	$6,250 to $12,500 **$6,250**	$2,500 to $6,250	$1,250 to $2,500
	MINOR	$2,500 to $6,250	$1,250 to $2,500	$250 to $1,250

PENALTY MATRIX WORKSHEET

CITATION: Bacteria Limits – October Through May

VIOLATION NO.: D (1); D (2)(c) & (d); D (3)(a), (b) & (c); D (4)(a) & (c)

TYPE		
__X__ TYPE I DIRECTLY related to protecting health, safety, welfare or environment.	**___TYPE II** INDIRECTLY related to protecting health, safety, welfare or environment.	**___TYPE III** INCIDENTAL to protecting health, safety, welfare or environment.

DEVIATION FROM THE STANDARD

THE DEGREE TO WHICH A VIOLATION IS OUT OF COMPLIANCE WITH THE REQUIREMENT VIOLATED.

FACTORS CONSIDERED:

Taken from Part 1.10A.1.b of the DEM's *Rules and Regulations for Assessment of Administrative Penalties*

(1) **The extent to which the act or failure to act was out of compliance:** Bristol failed to comply with its discharge permit limits for fecal coliform bacteria resulting in partially disinfected wastewater discharge to waters of the State. Compliance with permit limits is a major objective of the DEM's RIPDES Regulations, the DEM's Water Quality Regulations, and the DEM's O&M Regulations and is of major importance to the regulatory program.

(2) **Environmental conditions:** The wastewater is discharged to an area of Bristol Harbor which is designated as a Class SB1 water body of the State. Class SB1 waters are designated for fish and wildlife habitat, primary and secondary contact recreational activities, and shall have good aesthetic value. However, primary contact recreational activities may be impacted due to pathogens from approved wastewater discharges.

(3) **Amount of the pollutant:** Considered, but not utilized for this calculation.

(4) **Toxicity or nature of the pollutant:** Partially disinfected wastewater can contain many kinds of bacteria, viruses, and parasites that can cause serious or fatal diseases in both humans and animals, as well as being the source of extremely objectionable odors.

(5) **Duration of the violation:** 13 permit exceedances of the daily maximum limit and 2 permit exceedances of the weekly average limit during October through May for 2014, 2015, 2016 and 2017, when minimum contact recreational activities within the waterbody are expected to occur. The DEM did not assess a penalty for the weekly average limit exceedances, as these may have been caused by the daily maximum limit exceedances.

(6) **Areal extent of the violation:** Considered, but not utilized for this calculation.

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(7) **Whether the person took reasonable and appropriate steps to prevent and/or mitigate the noncompliance:** Bristol failed to take reasonable and appropriate steps to prevent or mitigate the non-compliance. On 7 June 2010, the DEM issued a Notice of Deficiency (NOD) to Bristol for the issues with the chlorination system. The NOD required that Bristol submit a plan and schedule for modification of the TRC analyzer/recorder to allow operation always and to make the necessary adjustments to the high and low chlorine level alarms such that the Facility operators can be notified of any chlorination system failures. On 7 March 2013, the DEM issued a letter to Bristol for the continued issues with the chlorination system. The letter required specific actions to address the issues. The DEM has also notified Bristol of the issues with the chlorination system in person, by telephone and through electronic correspondence. In response, Bristol took some actions; however, Bristol has not fully complied with the actions required by the DEM.

(8) **Whether the person has previously failed to comply with any regulations, order, statute, license, permit or approval issued or adopted by the Department, or any law which the Department has the authority or responsibility to enforce:** Considered, but not utilized for this calculation.

(9) **The degree of willfulness or negligence, including but not limited to, how much control the violator had over the occurrence of the violation and whether the violation was foreseeable:** Bristol has full control over the Facility, the wastewater treatment equipment and processes.

(10) **Any other factor(s) that may be relevant in determining the amount of a penalty:** Considered, but not utilized for this calculation.

MAJOR	MODERATE	X MINOR

Penalty Matrix where the applicable statute provides for a civil penalty up to $25,000		**TYPE I**	TYPE II	TYPE III
DEVIATION FROM STANDARD	MAJOR	$12,500 to $25,000	$6,250 to $12,500	$2,500 to $6,250
	MODERATE	$6,250 to $12,500	$2,500 to $6,250	$1,250 to $2,500
	MINOR	$2,500 to $6,250 **$2,500**	$1,250 to $2,500	$250 to $1,250

PENALTY MATRIX WORKSHEET

CITATION: Bacteria Limits – March 2015

VIOLATION NO.: D (1); D (2); D (3)(a), (b) & (c); D (4)(a) & (c)

TYPE		
__X__ TYPE I DIRECTLY related to protecting health, safety, welfare or environment.	**____TYPE II** INDIRECTLY related to protecting health, safety, welfare or environment.	**____TYPE III** INCIDENTAL to protecting health, safety, welfare or environment.

DEVIATION FROM THE STANDARD

THE DEGREE TO WHICH A VIOLATION IS OUT OF COMPLIANCE WITH THE REQUIREMENT VIOLATED.

FACTORS CONSIDERED:

Taken from Part 1.10A.1.b of the DEM's *Rules and Regulations for Assessment of Administrative Penalties*

(1) **The extent to which the act or failure to act was out of compliance:** Bristol failed to comply with its discharge permit limits for fecal coliform bacteria resulting in partially disinfected wastewater discharge to waters of the State. Compliance with permit limits is a major objective of the DEM's RIPDES Regulations, the DEM's Water Quality Regulations, and the DEM's O&M Regulations and is of major importance to the regulatory program.

(2) **Environmental conditions:** The wastewater is discharged to an area of Bristol Harbor which is designated as a Class SB1 water body of the State. Class SB1 waters are designated for fish and wildlife habitat, primary and secondary contact recreational activities, and shall have good aesthetic value. However, primary contact recreational activities may be impacted due to pathogens from approved wastewater discharges.

(3) **Amount of the pollutant:** Considered, but not utilized for this calculation.

(4) **Toxicity or nature of the pollutant:** Partially disinfected wastewater can contain many kinds of bacteria, viruses, and parasites that can cause serious or fatal diseases in both humans and animals, as well as being the source of extremely objectionable odors.

(5) **Duration of the violation:** 3 permit exceedances of the daily maximum limit and 2 permit exceedances of the weekly average limit during March 2015, when minimum contact recreational activities within the waterbody are expected to occur. The DEM did not assess a penalty for the weekly average limit exceedances, as these may have been caused by the daily maximum limit exceedances.

(6) **Areal extent of the violation:** The exceedances resulted in the DEM closing certain waters of Bristol Harbor and Hog Island to shellfish harvesting for 2 days (March 17 and March 18).

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(7) **Whether the person took reasonable and appropriate steps to prevent and/or mitigate the noncompliance:** Bristol failed to take reasonable and appropriate steps to prevent or mitigate the non-compliance. On 7 June 2010, the DEM issued a Notice of Deficiency (NOD) to Bristol for the issues with the chlorination system. The NOD required that Bristol submit a plan and schedule for modification of the TRC analyzer/recorder to allow operation always and to make the necessary adjustments to the high and low chlorine level alarms such that the Facility operators can be notified of any chlorination system failures. On 7 March 2013, the DEM issued a letter to Bristol for the continued issues with the chlorination system. The letter required specific actions to address the issues. The DEM has also notified Bristol of the issues with the chlorination system in person, by telephone and through electronic correspondence. In response, Bristol took some actions; however, Bristol has not fully complied with the actions required by the DEM.

(8) **Whether the person has previously failed to comply with any regulations, order, statute, license, permit or approval issued or adopted by the Department, or any law which the Department has the authority or responsibility to enforce:** Considered, but not utilized for this calculation.

(9) **The degree of willfulness or negligence, including but not limited to, how much control the violator had over the occurrence of the violation and whether the violation was foreseeable:** Bristol has full control over the Facility, the wastewater treatment equipment and processes.

(10) **Any other factor(s) that may be relevant in determining the amount of a penalty:** Considered, but not utilized for this calculation.

MAJOR	X MODERATE	MINOR

Penalty Matrix where the applicable statute provides for a civil penalty up to $25,000		**TYPE I**	TYPE II	TYPE III
DEVIATION FROM STANDARD	MAJOR	$12,500 to $25,000	$6,250 to $12,500	$2,500 to $6,250
	MODERATE	$6,250 to $12,500 **$6,250**	$2,500 to $6,250	$1,250 to $2,500
	MINOR	$2,500 to $6,250	$1,250 to $2,500	$250 to $1,250

PENALTY MATRIX WORKSHEET

CITATION: Toxicity Limit

VIOLATION NO.: D (1); D (2)(a), (c) &(d); D (3)(a), (b) & (c); D (4)(a) & (c)

TYPE		
__X__ TYPE I DIRECTLY related to protecting health, safety, welfare or environment.	**____TYPE II** INDIRECTLY related to protecting health, safety, welfare or environment.	**____TYPE III** INCIDENTAL to protecting health, safety, welfare or environment.

DEVIATION FROM THE STANDARD

THE DEGREE TO WHICH A VIOLATION IS OUT OF COMPLIANCE WITH THE REQUIREMENT VIOLATED.

FACTORS CONSIDERED:

Taken from Part 1.10A.1.b of the DEM's *Rules and Regulations for Assessment of Administrative Penalties*

(1) **The extent to which the act or failure to act was out of compliance:** Bristol failed to comply with its discharge permit limits for toxicity. Compliance with permit limits is a major objective of the DEM's RIPDES Regulations, the DEM's Water Quality Regulations, and the DEM's O&M Regulations and is of major importance to the regulatory program.

(2) **Environmental conditions:** The wastewater is discharged to an area of Bristol Harbor which is designated as a Class SB1 water body of the State. Class SB1 waters are designated for fish and wildlife habitat, primary and secondary contact recreational activities, and shall have good aesthetic value. However, primary contact recreational activities may be impacted due to pathogens from approved wastewater discharges.

(3) **Amount of the pollutant:** Considered, but not utilized for this calculation.

(4) **Toxicity or nature of the pollutant:** Wastewater contains many kinds of toxic pollutants that can cause serious or fatal diseases in both humans and animals, as well as being the source of objectionable odors.

(5) **Duration of the violation:** The violations occurred through 2 consecutive quarters in September 2014 and December 2014 and again for the quarter in September 2016.

(6) **Areal extent of the violation:** Considered, but not utilized for this calculation.

(continued)

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(7) **Whether the person took reasonable and appropriate steps to prevent and/or mitigate the noncompliance:** Bristol did not take reasonable steps to prevent the non-compliance. On or before 2014, Bristol began using the primary clarifiers to co-settle solids. In response to the Significant Noncompliance (SNC) letter that the DEM issued to Bristol on 11 February 2015, BETA submitted to the DEM on or about 27 February 2015 a letter that attributed the noncompliance, in part, to Bristol's use of the primary clarifiers to co-settle sludge during low flows. BETA stated that it concurred with Bristol's approach to address this issue by developing a SOP for polymer addition during low flows. The Facility O&M Plan describes that sludge is to be processed using a gravity thickener, sludge blending tanks (digesters) and related sludge pumps. Bristol, over the years, has abandoned the use of this equipment and no longer can thicken and store sludge with this equipment. The Facility O&M Plan calls for co-settling of sludge in the primary clarifiers only when the gravity thickener is out of service – it was not intended to be a long-term process. To mitigate the noncompliance, Bristol complied with the SNC letter and submitted a SOP for polymer addition during low flow (that the DEM approved on 28 July 2015).

(8) **Whether the person has previously failed to comply with any regulations, order, statute, license, permit or approval issued or adopted by the Department, or any law which the Department has the authority or responsibility to enforce:** Considered, but not utilized for this calculation.

(9) **The degree of willfulness or negligence, including but not limited to, how much control the violator had over the occurrence of the violation and whether the violation was foreseeable:** Bristol has full control over the Facility, the wastewater treatment equipment and processes.

(10) **Any other factor(s) that may be relevant in determining the amount of a penalty:** Considered, but not utilized for this calculation.

MAJOR	X MODERATE	MINOR

Penalty Matrix where the applicable statute provides for a civil penalty up to $25,000		**TYPE I**	TYPE II	TYPE III
DEVIATION FROM STANDARD	MAJOR	$12,500 to $25,000	$6,250 to $12,500	$2,500 to $6,250
	MODERATE	$6,250 to $12,500 **$6,250**	$2,500 to $6,250	$1,250 to $2,500
	MINOR	$2,500 to $6,250	$1,250 to $2,500	$250 to $1,250

PENALTY MATRIX WORKSHEET

CITATION: Kickemuit Pumping Station Overflow
VIOLATION NO.: D (1); D (2); D (3)(a) & (b)

TYPE		
___X___ TYPE I DIRECTLY related to protecting health, safety, welfare or environment.	**____TYPE II** INDIRECTLY related to protecting health, safety, welfare or environment.	**____TYPE III** INCIDENTAL to protecting health, safety, welfare or environment.

DEVIATION FROM THE STANDARD

THE DEGREE TO WHICH A VIOLATION IS OUT OF COMPLIANCE WITH THE REQUIREMENT VIOLATED.

FACTORS CONSIDERED:

Taken from Part 1.10A.1.b of the DEM's *Rules and Regulations for Assessment of Administrative Penalties*

(1) **The extent to which the act or failure to act was out of compliance:** Bristol discharged untreated wastewater to a water of the State caused by a crack in a sewer pipe. Prevention of unauthorized discharges of pollutants to waters of the State is a major objective of the DEM's RIPDES Regulations, the DEM's Water Quality Regulations, and the DEM's O&M Regulations and is of major importance to the regulatory program.

(2) **Environmental conditions:** The untreated wastewater was discharged to the Kickemuit River. Kickemuit River is classified under the DEM's *Water Quality Regulations* as SA and SA{b}. These waters are designated for shellfish harvesting for direct human consumption and primary and secondary contact recreational activities, and fish and wildlife habitat. Seasonal shellfish closures are enacted in SA{b} waters due to concentration of vessels. In May 2013, the DEM determined that seasonal shellfish closures were no longer necessary in Kickemuit River. A portion of Kickemuit River is classified by the DEM as Conditionally Approved for shellfish harvesting. Waters classified as Conditionally Approved are subject to periodic shellfish closures caused by high fecal coliform bacteria levels following precipitation events. Kickemuit River does not meet its assigned water quality designation for shellfish harvesting for direct human consumption according to the most recent DEM report of impaired waters entitled "STATE OF RHODE ISLAND 2014 303(d) LIST OF IMPAIRED WATERS FINAL May 2015". The cause of this impairment is its classification as Conditionally Approved.

(3) **Amount of the pollutant:** Unknown. Bristol originally reported to the DEM that a maximum volume of 10,000 gallons of wastewater was discharged; however, BETA reported later that the amount of wastewater discharged was between 400 and 500 gallons.

(4) **Toxicity or nature of the pollutant:** Wastewater contains many kinds of bacteria, viruses, and parasites and toxic pollutants that can cause serious or fatal diseases in both humans and animals, as well as being the source of objectionable odors.

(5) **Duration of the violation:** The discharge occurred on 26 June 2014. The closure of the Kickemuit River to shellfishing lasted for 28 days. The advisory to the public to refrain from any recreational contact within the Kickemuit River lasted for 5 days.

(6) **Areal extent of the violation:** Considered, but not utilized for this calculation.

(continued)

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(7) **Whether the person took reasonable and appropriate steps to prevent and/or mitigate the noncompliance:** The DEM has no information that Bristol failed to take reasonable and appropriate steps to prevent the noncompliance. To mitigate the noncompliance, Bristol repaired the cracked sewer pipe, but allowed the contractor to discharge between 100 and 200 gallons of wastewater directly to Kickemuit Avenue with an undetermined amount discharging to the Kickemuit River.

(8) **Whether the person has previously failed to comply with any regulations, order, statute, license, permit or approval issued or adopted by the Department, or any law which the Department has the authority or responsibility to enforce:** Considered, but not utilized for this calculation.

(9) **The degree of willfulness or negligence, including but not limited to, how much control the violator had over the occurrence of the violation and whether the violation was foreseeable:** Bristol has full control over the Facility, the wastewater treatment equipment and processes.

(10) **Any other factor(s) that may be relevant in determining the amount of a penalty:** Considered, but not utilized for this calculation.

MAJOR	X MODERATE	MINOR

Penalty Matrix where the applicable statute provides for a civil penalty up to $25,000		**TYPE I**	TYPE II	TYPE III
DEVIATION FROM STANDARD	MAJOR	$12,500 to $25,000	$6,250 to $12,500	$2,500 to $6,250
	MODERATE	$6,250 to $12,500 **$6,250**	$2,500 to $6,250	$1,250 to $2,500
	MINOR	$2,500 to $6,250	$1,250 to $2,500	$250 to $1,250

PENALTY MATRIX WORKSHEET

CITATION: Chlorination System Failure – May 2016
VIOLATION NO.: D (1); D (2)(c) & (d); D (3)(a), (b), & (c); D (4)(a) & (c)

TYPE		
__X__ TYPE I DIRECTLY related to protecting health, safety, welfare or environment.	**____TYPE II** INDIRECTLY related to protecting health, safety, welfare or environment.	**____TYPE III** INCIDENTAL to protecting health, safety, welfare or environment.

DEVIATION FROM THE STANDARD

THE DEGREE TO WHICH A VIOLATION IS OUT OF COMPLIANCE WITH THE REQUIREMENT VIOLATED.

FACTORS CONSIDERED:

Taken from Part 1.10A.1.b of the DEM's *Rules and Regulations for Assessment of Administrative Penalties*

(1) **The extent to which the act or failure to act was out of compliance:** Bristol discharged wastewater without disinfection to Bristol Harbor. Prevention of improperly treated wastewater to waters of the State is a major objective of the DEM's RIPDES Regulations, the DEM's Water Quality Regulations, and the DEM's O&M Regulations and is of major importance to the regulatory program.

(2) **Environmental conditions:** The partially treated wastewater was discharged to an area of Bristol Harbor which is designated as a Class SB1 water body of the State. Class SB1 waters are designated for fish and wildlife habitat, primary and secondary contact recreational activities, and shall have good aesthetic value. However, primary contact recreational activities may be impacted due to pathogens from approved wastewater discharges.

(3) **Amount of the pollutant:** Approximately 763,900 gallons.

(4) **Toxicity or nature of the pollutant:** Wastewater contains many kinds of bacteria, viruses, and parasites that can cause serious or fatal diseases in both humans and animals, as well as being the source of objectionable odors.

(5) **Duration of the violation:** 2 days – 29 May 2016 and 30 May 2016. The failure began at 11:30 PM on 29 May 2016 and ended at 7:00 PM on 30 May 2016.

(6) **Areal extent of the violation:** Considered, but not utilized for this calculation.

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(7) **Whether the person took reasonable and appropriate steps to prevent and/or mitigate the noncompliance:** Bristol did not take appropriate steps to prevent the noncompliance. Bristol uses oxygen reduction potential (ORP) readings to pace the chlorine feed and to activate alarms in the event of a system failure; however, Bristol lowered the ORP alarm points due to nuisance alarming which resulted in no notification to Facility operators that the chlorination system had failed. The failure of the alarm extended the duration of the violation. Bristol took reasonable and appropriate steps to mitigate the noncompliance when the Facility operators became aware of the failure the following morning.

(8) **Whether the person has previously failed to comply with any regulations, order, statute, license, permit or approval issued or adopted by the Department, or any law which the Department has the authority or responsibility to enforce:** Considered, but not utilized for this calculation.

(9) **The degree of willfulness or negligence, including but not limited to, how much control the violator had over the occurrence of the violation and whether the violation was foreseeable:** Bristol has full control over the Facility, the wastewater treatment equipment and processes.

(10) **Any other factor(s) that may be relevant in determining the amount of a penalty:** Considered, but not utilized for this calculation.

MAJOR	X MODERATE	MINOR

Penalty Matrix where the applicable statute provides for a civil penalty up to $25,000		**TYPE I**	TYPE II	TYPE III
DEVIATION FROM STANDARD	MAJOR	$12,500 to $25,000	$6,250 to $12,500	$2,500 to $6,250
	MODERATE	$6,250 to $12,500 **$6,250**	$2,500 to $6,250	$1,250 to $2,500
	MINOR	$2,500 to $6,250	$1,250 to $2,500	$250 to $1,250

PENALTY MATRIX WORKSHEET

CITATION: Chlorination System Failure – July 2016
VIOLATION NO.: D (1); D (2)(c) & (d); D (3)(a), (b) & (c); D (4)(a) & (c)

TYPE		
__X__ TYPE I DIRECTLY related to protecting health, safety, welfare or environment.	**___TYPE II** INDIRECTLY related to protecting health, safety, welfare or environment.	**___TYPE III** INCIDENTAL to protecting health, safety, welfare or environment.

DEVIATION FROM THE STANDARD

THE DEGREE TO WHICH A VIOLATION IS OUT OF COMPLIANCE WITH THE REQUIREMENT VIOLATED.

FACTORS CONSIDERED:

Taken from Part 1.10A.1.b of the DEM's *Rules and Regulations for Assessment of Administrative Penalties*

(1) **The extent to which the act or failure to act was out of compliance:** Bristol discharged wastewater without disinfection to Bristol Harbor. Prevention of improperly treated wastewater to waters of the State is a major objective of the DEM's RIPDES Regulations, the DEM's Water Quality Regulations, and the DEM's O&M Regulations and is of major importance to the regulatory program.

(2) **Environmental conditions:** The partially treated wastewater was discharged to an area of Bristol Harbor which is designated as a Class SB1 water body of the State. Class SB1 waters are designated for fish and wildlife habitat, primary and secondary contact recreational activities, and shall have good aesthetic value. However, primary contact recreational activities may be impacted due to pathogens from approved wastewater discharges.

(3) **Amount of the pollutant:** Approximately 456,033 gallons.

(4) **Toxicity or nature of the pollutant:** Wastewater contains many kinds of bacteria, viruses, and parasites that can cause serious or fatal diseases in both humans and animals, as well as being the source of objectionable odors.

(5) **Duration of the violation:** 1 day – 15 July 2016. The discharge occurred in 2 separate incidents. The first incident was for a duration of approximately 1 hour, and the second incident was for a duration of approximately 1¼ hours.

(6) **Areal extent of the violation:** Considered, but not utilized for this calculation.

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(7) **Whether the person took reasonable and appropriate steps to prevent and/or mitigate the noncompliance:** The first instance of noncompliance was the result of an electrical surge at the Facility. Bristol took reasonable steps to mitigate the noncompliance by replacement of the damaged chlorine pump. The second instance of noncompliance was the result of a power failure. Bristol failed to take reasonable steps to prevent the noncompliance by electrically connecting the chlorine pump to the backup generator. Bristol took reasonable steps to mitigate the noncompliance by connecting the pump to the generator.

(8) **Whether the person has previously failed to comply with any regulations, order, statute, license, permit or approval issued or adopted by the Department, or any law which the Department has the authority or responsibility to enforce:** Considered, but not utilized for this calculation.

(9) **The degree of willfulness or negligence, including but not limited to, how much control the violator had over the occurrence of the violation and whether the violation was foreseeable:** Bristol has full control over the Facility, the wastewater treatment equipment and processes.

(10) **Any other factor(s) that may be relevant in determining the amount of a penalty:** Considered, but not utilized for this calculation.

MAJOR	X MODERATE	MINOR

Penalty Matrix where the applicable statute provides for a civil penalty up to $25,000		**TYPE I**	TYPE II	TYPE III
DEVIATION FROM STANDARD	MAJOR	$12,500 to $25,000	$6,250 to $12,500	$2,500 to $6,250
	MODERATE	$6,250 to $12,500 **$6,250**	$2,500 to $6,250	$1,250 to $2,500
	MINOR	$2,500 to $6,250	$1,250 to $2,500	$250 to $1,250

PENALTY MATRIX WORKSHEET

CITATION: Reporting Of July 2016 Chlorination System Failure
VIOLATION NO.: D (1); D (2)(c) & (d); D (3)(a) & (d); D (4)(a) & (c)

TYPE		
__X__ TYPE I DIRECTLY related to protecting health, safety, welfare or environment.	**____TYPE II** INDIRECTLY related to protecting health, safety, welfare or environment.	**____TYPE III** INCIDENTAL to protecting health, safety, welfare or environment.

DEVIATION FROM THE STANDARD

THE DEGREE TO WHICH A VIOLATION IS OUT OF COMPLIANCE WITH THE REQUIREMENT VIOLATED.

FACTORS CONSIDERED:

Taken from Part 1.10A.1.b of the DEM's *Rules and Regulations for Assessment of Administrative Penalties*

(1) **The extent to which the act or failure to act was out of compliance:** Bristol failed to immediately report (within 24 hours) the chlorination failure to the DEM as required by its permit. Notification to the DEM of noncompliance that may endanger health or the environment is a major objective of the DEM's RIPDES Regulations, the DEM's Water Quality Regulations, and the DEM's O&M Regulations and is of major importance to the regulatory program.

(2) **Environmental conditions:** Considered, but not utilized for this calculation.

(3) **Amount of the pollutant:** Considered, but not utilized for this calculation.

(4) **Toxicity or nature of the pollutant:** Considered, but not utilized for this calculation.

(5) **Duration of the violation:** 4 days – the first chlorination failure occurred at 3:30 PM and the second chlorination failure occurred at 8:00 PM on 15 July 2016; however, Bristol did not verbally report the failures to the DEM until 19 July 2016.

(6) **Areal extent of the violation:** Considered, but not utilized for this calculation.

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(7) **Whether the person took reasonable and appropriate steps to prevent and/or mitigate the noncompliance:** Bristol failed to take reasonable and appropriate steps to prevent the noncompliance by immediately (within 24 hours) reporting the chlorination failures to the DEM. Bristol mitigated the noncompliance by reporting the chlorination failures on 19 July 2016 (4 days after becoming aware of the noncompliance).

(8) **Whether the person has previously failed to comply with any regulations, order, statute, license, permit or approval issued or adopted by the Department, or any law which the Department has the authority or responsibility to enforce:** Considered, but not utilized for this calculation.

(9) **The degree of willfulness or negligence, including but not limited to, how much control the violator had over the occurrence of the violation and whether the violation was foreseeable:** Bristol has full control over the Facility, the wastewater treatment equipment and processes.

(10) **Any other factor(s) that may be relevant in determining the amount of a penalty:** Considered, but not utilized for this calculation.

X MAJOR	**MODERATE**	**MINOR**

Penalty Matrix where the applicable statute provides for a civil penalty up to $25,000		**TYPE I**	TYPE II	TYPE III
DEVIATION FROM STANDARD	**MAJOR**	$12,500 to $25,000 **$25,000**	$6,250 to $12,500	$2,500 to $6,250
	MODERATE	$6,250 to $12,500	$2,500 to $6,250	$1,250 to $2,500
	MINOR	$2,500 to $6,250	$1,250 to $2,500	$250 to $1,250