

AUTHORIZATION TO DISCHARGE UNDER THE
RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of Chapter 46-12 of the Rhode Island General Laws, as amended,

Okonite Company
111 Martin Street
Ashton, RI 02864

is authorized to discharge from a facility located at

111 Martin Street
Ashton, RI 02864

to receiving waters named

Blackstone River

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

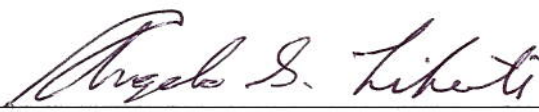
This permit shall become effective on November 1, 2010.

This permit and the authorization to discharge expire at midnight, five (5) years from the effective date.

This permit supersedes the permit issued on May 18, 2005.

This permit consists of twelve (12) pages in Part I including effluent limitations, monitoring requirements, etc. and ten (10) pages in Part II including General Conditions.

Signed this 29th day of September, 2010.


Angelo S. Liberti, P.E., Chief of Surface Water Protection
Office of Water Resources
Rhode Island Department of Environmental Management
Providence, Rhode Island

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from outfall serial number(s) 001 (consisting of contact and non-contact cooling water discharges and boiler blowdown).

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

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>			<u>Concentration - specify units</u>			<u>Monitoring Requirement</u>	
	Quantity - lbs. per day		Average <u>Monthly</u> (minimum)	Average <u>Weekly</u>	Maximum <u>Daily</u> (maximum)		Measurement <u>Frequency</u>	Sample <u>Type</u>
	Average <u>Monthly</u>	Maximum <u>Daily</u>						
Flow		47,500 GPD					Continuous ¹	Estimate ¹
Temperature, Effluent					(83 °F)		1/Month	4 Grabs/day ²
BOD ₅					26 mg/l		1/Quarter	24-Hr Composite
Oil and Grease			(--- mg/l)		(10 mg/l)		1/Quarter	4 Grabs/day ²
TSS					19 mg/l		1/Quarter	24-Hr Composite
pH			(6.5 s.u.)		(9.0 s.u.)		1/Month	4 Grabs/day ²
Total Copper			100 ug/l		100 ug/l		1/Quarter	24-Hr Composite
Total Phosphorus			--- ug/l		--- ug/l		1/Quarter	24-Hr Composite

¹ Influent water meter readings may be used as a substitute for an effluent flow meter.

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.

Values in parentheses () are to be reported as Minimum/Maximum for the reporting period rather than Average Monthly/Maximum Daily.

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

Samples taken in compliance with the monitoring requirements specified above shall be taken during dry weather (no rain 72 hours prior to or during sampling unless approved by DEM) at the following location: Outfall 001 - located at the manhole prior to where the storm water piping network joins the city storm sewer system at Martin Street which then discharges to the Blackstone River.

- a. The pH of the effluent shall not be less than 6.5 nor greater than 9.0 standard units at any time, unless these values are exceeded due to natural causes or as a result of the approved treatment processes.
 - b. The discharge shall not cause visible discoloration of the receiving waters.
 - c. The effluent shall contain neither a visible oil sheen, foam, nor floating solids at any time.
3. This permit authorizes the use of chemical additives DREWROL 7000 and AMERTROL 1100 ODT, manufactured by Ashland, for boiler treatment such that the concentration in the discharge will not exceed 300 mg/l, and 600 mg/l respectively.
4. The permittee shall obtain Department approval before increasing the amount of any of the treatment chemicals listed in Part I.A.3 or prior to using any other additive(s) in conjunction with or in place of the treatment chemicals listed in Part I.A.3 of this permit. Prior to using any other chemical additives the permittee shall submit for DEM approval a complete list of all chemical additives, including Material Safety Data Sheets. The permittee shall not begin to use any additional chemical additives other than those specified in Part I.A.3 of this permit without prior written approval from the Office of Water Resources.
5. The permittee shall evaluate the use of non-intrusive methods for boiler system maintenance in order to minimize chemical use at the facility and subsequent discharge to state surface waters. If chemical addition is the only alternative, the permittee must comply with all of the requirements of this permit with regard to chemical additives.
 - a. Maintenance chemicals must not contain any compounds that are listed as being cause for impairment of the receiving water body as listed in the State of Rhode Island 2008 303(d) List of Impaired Waters. In addition, any maintenance chemicals or biocides that contain tributyl tin, bis (tributyltin) oxide, or chlorinated phenols are strictly prohibited by this permit.
 - b. Algicides and biocides are to be used in accordance with registration requirements of the Federal Insecticide, Fungicide and Rodenticide Act.
 - c. The permittee must keep sufficient documentation on-site to show that the above requirements are being met. The following information shall be made available for on-site review by Department personnel during normal working hours:
 - i. Material Safety Data Sheets (MSDS) for each additive.
 - ii. The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)/U.S. EPA registration number.
 - iii. Boiler maintenance chemical purchase/service records which shall include enough information to document the quantity of chemicals used.
6. All maintenance chemicals stored on the same site as the boiler which are used for water treatment shall be stored inside a building or, if stored outside, shall be (1) within a dike or other barrier impervious to the material being contained, (2) supported by a base impervious to the material being contained, (3) covered by a permanent structure which prevents entry of precipitation, and (4) capable of holding without leakage or structural failure, 110 percent of the entire volume of the largest container within the area of the dike or barrier.
7. Boil out and boiler acid wastewaters are not covered by this permit. The discharge of these

wastewaters must be permitted separately, or these wastewaters must be collected by a waste transporter and disposed of off-site in accordance with State and Federal regulations.

8. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe:
 - a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) One hundred micrograms per liter (100 ug/l);
 - (2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitro-phenol; and one milligram per liter (1 mg/l) for antimony;
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 C.F.R. s122.21(g)(7); or
 - (4) Any other notification level established by the Director in accordance with 40 C.F.R. s122.44(f) and Rhode Island Regulations.
 - b. That any activity has occurred or will occur which would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) Five hundred micrograms per liter (500 ug/l);
 - (2) One milligram per liter (1 mg/l) for antimony;
 - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 C.F.R. s122.21(g)(7); or
 - (4) Any other notification level established by the Director in accordance with 40 C.F.R. s122.44(f) and Rhode Island Regulations.
 - c. That they have begun or expect to begin to use or manufacture as an intermediate or final product or by-product any toxic pollutant which was not reported in the permit application.

9. The permittee shall analyze its effluent from outfall 001 for the EPA Priority Pollutants as listed in 40CFR 122, Appendix D, Tables II and III during the 5th year of this permit. The results of analyses shall be submitted to the Department of Environmental Management at least 180 days prior to permit expiration with the permit renewal application. All sampling and analysis shall be done in accordance with EPA Regulations, including 40 CFR, Part 136; grab and composite samples shall be taken as appropriate.
10. This permit serves as the State's Water Quality Certificate for the discharges described herein.

B. STORM WATER POLLUTION PREVENTION PLAN

The conditions and Best Management Practices (BMPs) of the Storm Water Pollution Prevention Plan (SWPPP) developed by the facility under the 2005 permit shall be adhered to per the following SWPPP requirements:

1. The permittee shall continue to maintain and implement a Storm Water Pollution Prevention Plan (SWPPP) that has been prepared in accordance with good engineering practices and identifies potential sources of pollutants, which may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. In addition, the Plan shall describe and ensure the implementation of BMPs which are to be used to reduce or eliminate the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit.
2. The Plan shall be signed by the permittee in accordance with RIPDES Rule 12 and retained on-site. The Plan shall be made available upon request to the Director.
3. If the Plan is reviewed by the Director, he or she may notify the permittee at any time that the Plan does not meet one or more of the minimum requirements of this part. After such notification from the Director, the permittee shall make changes to the Plan and shall submit to the Director a written certification that the requested changes have been made. Unless otherwise provided by the Director, the permittee shall have thirty (30) days after such notification to make the necessary changes.
4. The permittee shall immediately amend the Plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to the waters of the State; a release of reportable quantities of hazardous substances and oil; or if the SWPPP proves to be ineffective in achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity. Changes must be noted and then submitted to this Department. Amendments to the Plan may be reviewed by DEM in the same manner as Part I.B.3 of this permit.
5. The SWPPP shall include, at a minimum, the following items:
 - a. Description of Potential Pollutant Sources.
The Plan must provide a description of potential sources which may be reasonably expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during dry weather from separate storm sewers draining the facility. It must identify all activities and significant materials, which may potentially be significant pollutant sources. Each plan shall include:
 - (1) A site map indicating: a delineation of the drainage area of each storm

water outfall, each existing structural control measure to reduce pollutants in storm water runoff, locations where significant materials are exposed to storm water, locations where significant leaks or spills have occurred, a delineation of all impervious surfaces, all surface water bodies, all separate storm sewers, and the locations of the following activities where such areas are exposed to storm water: fueling stations, vehicle and equipment maintenance and/or cleaning areas, material handling areas, material storage areas, process areas, and waste disposal areas;

- (2) A topographic map extending one-quarter of a mile beyond the property boundaries of the facility;
- (3) An estimate of the overall runoff coefficient for the site, determined by an acceptable method, such as, but not limited to, area weighting;
- (4) A narrative description of significant materials that have been treated, stored, or disposed of in a manner to allow exposure to storm water between the time of three (3) years prior to the issuance of this permit to the present; method of on-site storage or disposal; materials management practices employed to minimize contact of these materials with storm water runoff between the time of three (3) years prior to the issuance of this permit and the present; materials loading and access areas; the location and description of existing structural and non-structural control measures to reduce pollutants in storm water runoff; and description of any treatment the storm water receives;
- (5) A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at the facility three (3) years prior to the effective date of this permit to the present;
- (6) A list of any pollutants limited in effluent guidelines to which a facility is subject under 40 CFR Subchapter N, any pollutants listed on a RIPDES permit to discharge process water, and any information required under RIPDES Rule 11.02(a)(14)(iii)-(v) or 40 CFR 122.21(g)(iii)-(v);
- (7) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow and an estimate of the types of pollutants, which are likely to be present in storm water associated with industrial activity;
- (8) A summary of existing sampling data describing pollutants in storm water discharges from the facility; and

b. Storm Water Management Controls. The permittee must develop a description of storm water management controls appropriate for the facility and implement such controls. The appropriateness for implementing controls listed in the Plan must reflect identified potential sources of pollutants at the facility. The description of storm water management controls must address the following minimum components, including a schedule for implementing such controls:

- (1) *Pollution Prevention Team.* The Plan must identify a specific individual(s) within the facility organization as members of a team that are responsible for developing the Plan and assisting the plant manager in its implementation, maintenance, and revision. The Plan must clearly identify

the responsibilities of each team member. The activities and responsibilities of the team must address all aspects of facility's Plan.

- (2) *Risk Identification and Assessment/Material Inventory.* The Plan must assess the potential of various sources which contribute pollutants to storm water discharge associated with the industrial activity. The Plan must include an inventory of the types of materials handled. Each of the following must be evaluated for the reasonable potential for contributing pollutants to runoff: loading and unloading operations, outdoor manufacturing or processing activities, significant dust or particulate generating processes, and on-site waste disposal practices. Factors to consider include the toxicity of chemicals; quantity of chemicals used, produced, or discharged; the likelihood of contact with storm water, and the history of significant leaks or spills of toxic or hazardous pollutants.
- (3) *Preventative Maintenance.* A preventative maintenance program must involve inspection and maintenance of storm water management devices (i.e., oil/water separators, catch basins) as well as inspecting and testing plant equipment and systems to uncover conditions that could cause breakdown or failures resulting in discharges of pollutants to surface waters.
- (4) *Good Housekeeping.* Good housekeeping requires the maintenance of a clean, orderly facility.
- (5) *Spill Prevention and Response Procedure.* Areas where potential spills can occur, and their accompanying drainage points, must be identified clearly in the SWPPP. The potential for spills to enter the storm water drainage system must be eliminated wherever feasible. Where appropriate, specific material handling procedures, storage requirements, and procedures for cleaning up spills must be identified in the Plan and made available to the appropriate personnel. The necessary equipment to implement a clean up must also be made available to personnel. The permittee shall immediately notify the office of releases in excess of reportable quantities.
- (6) *Storm Water Management.* The Plan must contain a narrative consideration of the appropriateness of traditional storm water management practices. Based on an assessment of the potential of various sources at the plant to contribute pollutants to storm water discharges associated with industrial activity (see Part I.B.5.b.2 of this permit), the Plan must provide that measures, determined to be reasonable and appropriate, must be implemented and maintained.
- (7) *Sediment and Erosion Prevention.* The Plan must identify areas which; due to topography, activities, or other factors; have a high potential for significant soil erosion and identify measures to limit erosion.
- (8) *Employee Training.* Employee training programs must inform personnel responsible for implementing activities identified in the Plan, or otherwise responsible for storm water management at all levels, of the components and goals of the Plan. Training should address topics such as spill response, good housekeeping, and material management practices. The Plan must identify periodic dates for such training.

- (9) *Visual Inspections.* Qualified plant personnel must be identified to inspect designated equipment and plant areas. Material handling areas must be inspected for evidence of, or the potential for, pollutants entering the drainage system. A tracking or follow up procedure must be used to ensure that the appropriate action has been taken in response to the inspection. Records of inspections must be maintained on site for at least five (5) years.
 - (10) *Recordkeeping and Internal Reporting Procedures.* Incidents such as spills, or other discharges, along with other information describing the quality and quantity of storm water discharges must be included in the records. All inspections and maintenance activities must be documented and maintained on site for at least five (5) years.
- c. Site Inspection. An annual site inspection must be conducted by appropriate personnel named in the SWPPP to verify that the description of potential pollutant sources required under Part I.B.5.a is accurate, that the drainage map has been updated or otherwise modified to reflect current conditions, and controls to reduce pollutants in storm water discharges associated with industrial activity identified in the Plan are being implemented and are adequate. A tracking or follow up procedure must be used to ensure that the appropriate action has been taken in response to the inspection. Records documenting significant observations made during the site inspection must be retained as part of the SWPPP for a minimum of five (5) years.
 - d. Consistency with Other Plans. Storm water management controls may reflect requirements for Spill Prevention Control and Counter-measure (SPCC) plans under Section 311 of the CWA or Best Management Practices (BMP) Programs otherwise required by a RIPDES permit and may incorporate any part of such plans into the SWPPP by reference.

C. DETECTION LIMITS

The permittee shall assure that all wastewater testing required by this permit, is performed in conformance with the method detection limits listed below. In accordance with 40 CFR Part 136, EPA approved analysis techniques, quality assurance procedures and quality control procedures shall be followed for all reports required to be submitted under the RIPDES program. These procedures are described in "Methods for the Determination of Metals in Environmental Samples" (EPA/600/4-91/010) and "Methods for Chemical Analysis of Water and Wastes" (EPA/600/4-79/020).

The report entitled "Methods for the Determination of Metals in Environmental Samples" includes a test which must be performed in order to determine if matrix interferences are present, and a series of tests to enable reporting of sample results when interferences are identified. Each step of the series of tests becomes increasingly complex, concluding with the complete Method of Standard Additions analysis. The analysis need not continue once a result which meets the applicable quality control requirements has been obtained. Documentation of all steps conducted to identify and account for matrix interferences shall be submitted along with the monitoring reports.

If, after conducting the complete Method of Standard Additions analysis, the laboratory is unable to determine a valid result, the laboratory shall report "could not be analyzed". Documentation supporting this claim shall be submitted along with the monitoring report. If valid analytical results are repeatedly unobtainable, DEM may require that the permittee determine a method detection limit (MDL) for their effluent or sludge as outlined in 40 CFR Part 136, Appendix B.

Therefore, all sample results shall be reported as: an actual value, "could not be analyzed", less than the reagent water MDL, or less than an effluent or specific MDL. The effluent or specific MDL must be calculated using the methods outlined in 40 CFR Part 136, Appendix B. Samples which have been diluted to ensure that the sample concentration will be within the linear dynamic range shall not be diluted to the extent that the analyte is not detected. If this should occur the analysis shall be repeated using a lower degree of dilution.

When calculating sample averages for reporting on discharge monitoring reports (DMRs):

1. "could not be analyzed" data shall be excluded, and shall not be considered as failure to comply with the permit sampling requirements;
2. results reported as less than the MDL shall be included as values equal to the MDL, and the average shall be reported as "less than" the calculated value.

For compliance purposes, DEM will replace all data reported as less than the MDL with zeroes, provided that DEM determines that all appropriate EPA approved methods were followed. If the re-calculated average exceeds the permit limitation it will be considered a violation.

LIST OF TOXIC POLLUTANTS

The following list of toxic pollutants has been designated pursuant to Section 307(a)(1) of the Clean Water Act. The Method Detection Limits (MDLs) represent the required Rhode Island MDLs.

Volatiles - EPA Method 624		MDL ug/l (ppb)	Pesticides - EPA Method 608		MDL ug/l (ppb)
1V	acrolein	10.0	18P	PCB-1242	0.289
2V	acrylonitrile	5.0	19P	PCB-1254	0.298
3V	benzene	1.0	20P	PCB-1221	0.723
5V	bromoform	1.0	21P	PCB-1232	0.387
6V	carbon tetrachloride	1.0	22P	PCB-1248	0.283
7V	chlorobenzene	1.0	23P	PCB-1260	0.222
8V	chlorodibromomethane	1.0	24P	PCB-1016	0.494
9V	chloroethane	1.0	25P	toxaphene	1.670
10V	2-chloroethylvinyl ether	5.0			
11V	chloroform	1.0	Base/Neutral - EPA Method 625		MDL ug/l (ppb)
12V	dichlorobromomethane	1.0	1B	acenaphthene *	1.0
14V	1,1-dichloroethane	1.0	2B	acenaphthylene *	1.0
15V	1,2-dichloroethane	1.0	3B	anthracene *	1.0
16V	1,1-dichloroethylene	1.0	4B	benzidine	4.0
17V	1,2-dichloropropane	1.0	5B	benzo(a)anthracene *	2.0
18V	1,3-dichloropropylene	1.0	6B	benzo(a)pyrene *	2.0
19V	ethylbenzene	1.0	7B	3,4-benzofluoranthene *	1.0
20V	methyl bromide	1.0	8B	benzo(ghi)perylene *	2.0
21V	methyl chloride	1.0	9B	benzo(k)fluoranthene *	2.0
22V	methylene chloride	1.0	10B	bis(2-chloroethoxy)methane	2.0
23V	1,1,2,2-tetrachloroethane	1.0	11B	bis(2-chloroethyl)ether	1.0
24V	tetrachloroethylene	1.0	12B	bis(2-chloroisopropyl)ether	1.0
25V	toluene	1.0	13B	bis(2-ethylhexyl)phthalate	1.0
26V	1,2-trans-dichloroethylene	1.0	14B	4-bromophenyl phenyl ether	1.0
27V	1,1,1-trichloroethane	1.0	15B	butylbenzyl phthalate	1.0
28V	1,1,2-trichloroethane	1.0	16B	2-chloronaphthalene	1.0
29V	trichloroethylene	1.0	17B	4-chlorophenyl phenyl ether	1.0
31V	vinyl chloride	1.0	18B	chrysene *	1.0
Acid Compounds - EPA Method 625		MDL ug/l (ppb)	19B	dibenzo (a,h)anthracene *	2.0
1A	2-chlorophenol	1.0	20B	1,2-dichlorobenzene	1.0
2A	2,4-dichlorophenol	1.0	21B	1,3-dichlorobenzene	1.0
3A	2,4-dimethylphenol	1.0	22B	1,4-dichlorobenzene	1.0
4A	4,6-dinitro-o-cresol	1.0	23B	3,3'-dichlorobenzidine	2.0
5A	2,4-dinitrophenol	2.0	24B	diethyl phthalate	1.0
6A	2-nitrophenol	1.0	25B	dimethyl phthalate	1.0
7A	4-nitrophenol	1.0	26B	di-n-butyl phthalate	1.0
8A	p-chloro-m-cresol	2.0	27B	2,4-dinitrotoluene	2.0
9A	pentachlorophenol	1.0	28B	2,6-dinitrotoluene	2.0
10A	phenol	1.0	29B	di-n-octyl phthalate	1.0
11A	2,4,6-trichlorophenol	1.0	30B	1,2-diphenylhydrazine (as azobenzene)	1.0
Pesticides - EPA Method 608		MDL ug/l (ppb)	31B	fluoranthene *	1.0
1P	aldrin	0.059	32B	fluorene *	1.0
2P	alpha-BHC	0.058	33B	hexachlorobenzene	1.0
3P	beta-BHC	0.043	34B	hexachlorobutadiene	1.0
4P	gamma-BHC	0.048	35B	hexachlorocyclopentadiene	2.0
5P	delta-BHC	0.034	36B	hexachloroethane	1.0
6P	chlordane	0.211	37B	indeno(1,2,3-cd)pyrene *	2.0
7P	4,4'-DDT	0.251	38B	isophorone	1.0
8P	4,4'-DDE	0.049	39B	naphthalene *	1.0
9P	4,4'-DDD	0.139	40B	nitrobenzene	1.0
10P	dieldrin	0.082	41B	N-nitrosodimethylamine	1.0
11P	alpha-endosulfan	0.031	42B	N-nitrosodi-n-propylamine	1.0
12P	beta-endosulfan	0.036	43B	N-nitrosodiphenylamine	1.0
13P	endosulfan sulfate	0.109	44B	phenanthrene *	1.0
14P	endrin	0.050	45B	pyrene *	1.0
15P	endrin aldehyde	0.062	46B	1,2,4-trichlorobenzene	1.0
16P	heptachlor	0.029			
17P	heptachlor epoxide	0.040			

OTHER TOXIC POLLUTANTS

Updated: March 28, 2000

	MDL ug/l (ppb)
Antimony, Total	3.0
Arsenic, Total	1.0
Beryllium, Total	0.2
Cadmium, Total	0.1
Chromium, Total	1.0
Chromium, Hexavalent****	20.0
Copper, Total	1.0
Lead, Total	1.0
Mercury, Total	0.2
Nickel, Total	1.0
Selenium, Total	2.0
Silver, Total	0.5
Thallium, Total	1.0
Zinc, Total	5.0
Asbestos	**
Cyanide, Total	10.0
Phenols, Total***	50.0
TCDD	**
MTBE (Methyl Tert Butyl Ether)	1.0

* Polynuclear Aromatic Hydrocarbons

** No Rhode Island Department of Environmental Management (RIDEM) MDL

*** Not a priority pollutant

NOTE:

To help verify the absence of matrix or chemical interference the analyst is required to complete specific quality control procedures. For the metals analyses listed above the analyst must withdraw from the sample two equal aliquots; to one aliquot add a known amount of analyte, and then dilute both to the same volume and analyze. The unspiked aliquot multiplied by the dilution factor should be compared to the original. Agreement of the results within 10% indicates the absence of interference. Comparison of the actual signal from the spiked aliquot to the expected response from the analyte in an aqueous standard should help confirm the finding from the dilution analysis. (Methods for Chemical Analysis of Water and Wastes EPA-600/4-79/020). For Methods 624 and 625 the laboratory must on an ongoing basis, spike at least 5% of the samples from each sample site being monitored. For laboratories analyzing 1 to 20 samples per month, at least one spiked sample per month is required. The spike should be at the discharge permit limit or 1 to 5 times higher than the background concentration determined in Section 8.3.2, whichever concentration would be larger. (40 CFR Part 136 Appendix B Method 624 and 625 subparts 8.3.1 and 8.3.11).

D. **MONITORING AND REPORTING**

1. Monitoring

All monitoring required by this permit shall be done in accordance with sampling and analytical testing procedures specified in Federal Regulations (40 CFR Part 136).

Outfall 001

All samples must be collected during a dry weather period (no rain 72 hours prior to or during sampling unless approved by DEM).

2. Reporting

Monitoring results obtained during the previous 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 quarter as follows:

<u>Quarter Testing to be Performed</u>	<u>Report Due No Later Than</u>	<u>Results Submitted on 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

A signed copy of these, and all other reports required herein, shall be submitted to:

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

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES
235 PROMENADE STREET
PROVIDENCE, RHODE ISLAND 02908-5767

STATEMENT OF BASIS

RHODE ISLAND POLLUTANT DISCHARGE ELIMINATION SYSTEM (RIPDES) PERMIT TO
DISCHARGE TO WATERS OF THE STATE

RIPDES PERMIT NO.

RI0020141

NAME AND ADDRESS OF APPLICANT:

Okonite Company
111 Martin Street
Ashton, RI 02864

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

Okonite Company
111 Martin Street
Ashton, RI 02864

RECEIVING WATER:

Blackstone River

CLASSIFICATION:

B1

I. Proposed Action, Type of Facility, and Discharge Location

The above named applicant has applied to the Rhode Island Department of Environmental Management for reissuance of a RIPDES Permit to discharge into the designated receiving water. The facility is engaged in the manufacturing of insulated wires and cables. The discharge consists of contact and non-contact cooling water, storm water, and boiler blowdown / steam condensate.

II. Permit Limitations and Conditions

The effluent limitations and monitoring requirements may be found in the draft permit.

III. Permit Basis and Explanation of Effluent Limitation Derivation

The Facility

The Okonite Company has been manufacturing insulated wire and cable since the 1970's. The facility was first issued a NPDES permit on June 24, 1979. The permit was subsequently reissued three times: on October 6, 1980, on January 12, 1986, and on May 18, 2005. Currently the Ashton, RI facility specializes in thermoplastic instrumentation, control, communication, and supervisory control cables, x-ray, C-L-X and Loxarmor armored cables. The 2010 permit is a reissuance of the 2005 permit. During the development of the 2010 permit, DEM became aware of a boiler blowdown

discharge that had not been identified in the course of previous permit reissuances. The boiler blowdown discharge was brought into the permitting process in the development of the 2010 permit.

General Requirements

Development of RIPDES permit limitations is a multi-step process consisting of the following steps: identifying applicable technology-based limits; calculating allowable water-quality based discharge levels based on instream criteria, background data and available dilution; establishing Best Professional Judgement (BPJ) limits in accordance with Section 402 of the CWA; and assigning the most stringent as the final discharge limitations.

Water quality criteria are comprised of numeric and narrative criteria. Numeric criteria are scientifically derived ambient concentrations developed by EPA or States for various pollutants of concern to protect human health and aquatic life. Narrative criteria are statements that describe the desired water quality goal. A technology-based limit is a numeric limit, which is determined by examining the capability of a treatment process to reduce or eliminate pollutants.

Water Quality Based Limits

Appendix B of the Water Quality Regulations describes the flows used to determine compliance with the aquatic life criteria, specifying that the design flow to be utilized for aquatic life criteria shall not be exceeded at or above the lowest average 7 consecutive day low flow with an average recurrence frequency of once in 10 years (7Q10). For determination of the 7Q10 flow, data was taken from gauge station #01112500 located on the Blackstone River @ Woonsocket. The Blackstone River @ Woonsocket gauge station is a conservative estimate of the 7Q10 flow in the river at the point of discharge, which is downstream of this gauging station. Using this gauging station, the 7Q10 flow for this site was determined to be 102.25 ft³/s. The dilution factor (DF) used to establish the allowable water quality based discharge concentrations was then determined using the following equation:

$$DF = \frac{Q_D + Q_{dis.}}{Q_{dis.}}$$

Where: DF = Dilution Factor
Q_D = Design Flow (Receiving Water 7Q10 Flow)
Q_{dis.} = Discharge Flow

Outfall 001A

The dilution factor was determined to be 1392 based on a design flow of 102.25 cfs and a maximum discharge flow of 0.073 ft³/s (47,500 gpd).

Water Quality Based Permit Limitations

The allowable effluent limitations were established based on the non-class A freshwater acute and chronic aquatic life criteria and human health criteria specified in Appendix B of the Rhode Island Water Quality Regulations, as amended, using 80% allocation when no background data was available and 90% allocation when background data is available. Since there is no background data available, the allowable water quality-based discharge levels are set equal to 80% of the water quality criteria for Class B waters as listed in Appendix B of the Rhode Island Water Quality Regulations using the following equation:

$$Limit = (DF) * (Criteria) * (80\%)$$

Because the Blackstone River is listed as impaired for Total Phosphorus on Rhode Island's latest list of impaired waters, the permit includes quarterly monitoring for Total Phosphorus. If it is determined that this facility discharges significant levels of Phosphorus, limits will be included in the permit.

Metals and Other Toxic Pollutants

In accordance with 40 CFR 122.4(d)(1)(iii), water quality based effluent limitations are only required for those pollutants in the discharge that have the reasonable potential to cause or contribute to the exceedence of instream criteria. In order to evaluate the need for permit limits, the allowable monthly average (chronic) and allowable maximum daily (acute) discharge concentrations are compared to the Discharge Monitoring Report (DMR) data for the facility, priority pollutant scan data for the facility, and water quality data reported on the facility's permit application. Based on the comparison of potential limits to effluent data, it was determined that no reasonable potential existed for water quality exceedances for these parameters. However, based on antidegradation, the maximum daily limit for Total Copper will remain at 100 ug/l and an equivalent monthly average limit of 100 ug/l will be maintained from the 2005 permit.

Conventional Pollutants

The limits for pH have been set equal to the criteria from Table 1.8.D(2) of the Rhode Island Water Quality Regulations for Class B Fresh Waters.

The 83 degree F effluent limitation for temperature has been established in accordance with Rhode Island Water Quality Regulations Table 1.8.D.(2) Class Specific Criteria – Class B Fresh Waters (See Attachment B).

Oil and Grease effluent limitations, of 10 mg/l, are based on the previous permit requirements. The 10 mg/l limit is more stringent than the 15 mg/l daily maximum Oil and Grease limit that the Environmental Protection Agency (EPA) has established for most industry groups. Therefore, in accordance with antibacksliding, the 10 mg/l limit is being carried forward from the previous permit.

TSS and BOD₅ effluent limitations are taken directly from 40 CFR Part 463 – Effluent Limitation Guidelines for the Plastics Molding and Forming Point Source Category Subpart A – Contact Cooling and Heating Water Subcategory. Subpart A applies to discharges of pollutants from processes in the contact cooling and heating water subcategory to waters of the United States and the introduction of such pollutants into publicly owned treatment works. Processes in the contact cooling and heating water subcategory are processes where water comes in contact with plastic materials or plastic products for the purpose of heat transfer during plastics molding and forming. The effluent limitation guidelines represent the degree of effluent reduction attainable by the application of the best practicable control technology (BPT). The Effluent Limitation Guidelines for Plastics Molding and Forming Point Source Category Subpart A – Contact Cooling and Heating Water Subcategory specify 6.0 – 9.0 S.U. for pH and 29 mg/l daily max for Oil and Grease. However due to the fact that the previous oil and grease limits of 10 mg/l and the water quality regulations specify a narrower pH range of 6.5-9.0 S.U. they have been chosen as final permit limits.

Boiler Blowdown Discharge

The RIPDES permit application resubmitted May 26, 2010 reported a boiler blowdown / steam condensate discharge of 500 gallons per day. This discharge was brought into the permitting process in conjunction with RIPDES guidance. Permit conditions relating to boiler blowdown discharges were added to the 2010 permit and may be found in parts I.A.3-7 of the permit. These conditions limit the type of boiler treatment chemicals that may be used to ensure that their

use will not result in aquatic life toxicity, based on a comparison of treatment chemical concentrations against the toxic levels listed in the applicable MSDS.

Stormwater Monitoring

The facility was required to develop and maintain a Stormwater Pollution Prevention Plan (SWPPP) under the 2005 permit. The facility submitted the SWPPP on October 5, 2005. DEM reviewed the SWPPP on October 11, 2005 and found the SWPPP to be acceptable. This permit requires that the facility maintain its SWPPP.

Antibacksliding/Antidegradation

The Antibacksliding Provision of the Clean Water Act (found at Section 402(o) and repeated at 40 CFR 122.44(l)) prohibits reissuing a permit containing less stringent effluent limits than the comparable limits from the previous permit. Since none of the permit limits, both concentration and mass loadings, are less stringent than in the previous permit, antibacksliding regulations are being met. The draft permit is being reissued with limitations as stringent or more stringent than those in the existing permit with no change to the outfall location.

Selection of Final Permit Limits

The effluent monitoring requirements have been specified in accordance with RIPDES regulations as well as 40 CFR 122.41(j), 122.44(l), and 122.48 to yield data representative of the discharge. The Office has determined that all permit limitations are consistent with the Rhode Island Antidegradation Policy.

The remaining general and specific conditions of the permit are based on the RIPDES regulations as well as 40 CFR Parts 122 through 125 and consisting primarily of management requirements common to all permits.

IV. Comment Period, Hearing Requests, and Procedures for Final Decisions

All persons, including applicants, who believe any condition of the draft permit is inappropriate must raise all issues and submit all available arguments and all supporting material for their arguments in full by the close of the public comment period, to the Rhode Island Department of Environmental Management, Office of Water Resources, 235 Promenade Street, Providence, Rhode Island, 02908-5767. Any person, prior to such date, may submit a request in writing for a public hearing to consider the draft permit to the Rhode Island Department of Environmental Management. Such requests shall state the nature of the issues proposed to be raised in the hearing. A public hearing may be held after at least thirty (30) days public notice whenever the Director finds that response to this notice indicates significant public interest. In reaching a final decision on the draft permit the Director will respond to all significant comments and make these responses available to the public at DEM's Providence Office.

Following the close of the comment period, and after a public hearing, if such hearing is held, the Director will issue a final permit decision and forward a copy of the final decision to the applicant and each person who has submitted written comments or requested notice. Within thirty (30) days following the notice of the final permit decision any interested person may submit a request for a formal hearing to reconsider or contest the final decision. Requests for formal hearings must satisfy the requirements of Rule 49 of the Regulations for the Rhode Island Pollutant Discharge Elimination System.

V. **DEM Contact**

Additional information concerning the permit may be obtained between the hours of 8:30 a.m. and 4:00 p.m., Monday through Friday, excluding holidays from:

Samuel Kaplan, P.E.
RIPDES Program
Department of Environmental Management
235 Promenade Street
Providence, Rhode Island 02908
Telephone: (401) 222-4700, ext. 7046

8/20/10
Date


Eric A. Beck, P.E.
Supervising Sanitary Engineer
Office of Water Resources
Department of Environmental Management

ATTACHMENT A

DESCRIPTION OF DISCHARGE: Contact and Non-Contact Cooling Water and boiler blowdown
DISCHARGE: 001A

AVERAGE EFFLUENT CHARACTERISTICS AT POINT OF DISCHARGE OF SELECTED POLLUTANTS:

Data is taken from between 1/1/05 and 12/31/09

PARAMETER	AVERAGE	MAXIMUM
FLOW (GAL/DAY)	22,404	43,030
TEMPERATURE (DEG. F)	60.88	
MINIMUM pH (SU)	7.44	
MAXIMUM pH (SU)	7.65	
Oil and Grease (mg/l)	5.02	5.98
Total Copper (ug/l)	21.6	21.6
BOD (mg/l)		15.47
TSS (mg/l)		12.61

ATTACHMENT B

Flow:

Receiving Water – Blackstone River 7Q10 @ Woonsocket = 66 MGD
Outfall 001 - Daily Maximum Limit = 0.0475 MGD (47,500 GPD)

Temperature:

Outfall 001 - Temperature Limit = 83 °F
Instream Temperature - Summer = 72 °F
Instream Temperature - Winter = 36 °F

Water Quality Limits:

Net Instream Temperature Change - Winter = 4.0 °F
Net Instream Temperature Change - Summer = 1.6 °F

Mass Balance:

$$Q_{\max}(T_{\text{limit}}) + Q_{7Q10}(T_{\text{instream}}) = (Q_{\max} + Q_{7Q10})(T_{\text{instream}} + \Delta T)$$

Where: Q_{\max} = Daily Maximum Limit @ Outfall 001A
 Q_{7Q10} = Low Flow for Blackstone River
 T_{limit} = Proposed Permit Limit for Temperature
 T_{instream} = Instream Ambient Temperature
 ΔT = Net Change in Temperature

Case 1 - Summer Months

$$(0.0475 \text{ MGD})(83^{\circ}\text{F}) + (66 \text{ MGD})(72^{\circ}\text{F}) = (0.0475 \text{ MGD} + 66 \text{ MGD})(72^{\circ}\text{F} + \Delta T)$$

$$\Delta T = 0.08^{\circ}\text{F} \leq 1.6^{\circ}\text{F} - \text{Proposed limit increase meets Water Quality Regulations.}$$

Case 2 - Winter Months

$$(0.0475 \text{ MGD})(83^{\circ}\text{F}) + (66 \text{ MGD})(36^{\circ}\text{F}) = (0.0475 \text{ MGD} + 66 \text{ MGD})(36^{\circ}\text{F} + \Delta T)$$

$$\Delta T = 0.034^{\circ}\text{F} \leq 4.0^{\circ}\text{F} - \text{Proposed limit increase meets Water Quality Regulations.}$$



RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

September 30, 2010

CERTIFIED MAIL

Mr. John Silver
Vice President - Manufacturing
The Okonite Company
Post Office Box 340
Ramsey, NJ 07446

**RE: Final RIPDES Permit for the Okonite Company in Ashton, RI Facility
RIPDES Application No. RI0020141**

Dear Mr. Silver:

Enclosed is your final Rhode Island Pollutant Discharge Elimination System (RIPDES) Permit issued pursuant to the referenced application. State regulations, promulgated under Chapter 46-12 of the Rhode Island General Laws of 1956, as amended, require this permit to become effective on the date specified in the permit.

Also enclosed is information relative to hearing requests and stays of RIPDES Permits.

We appreciate your cooperation throughout the development of this permit. Should you have any questions concerning this permit, feel free to contact Samuel Kaplan of the State Permits Staff at (401) 222-4700, extension 7046.

Sincerely,

A handwritten signature in black ink, appearing to read "Eric A. Beck".

Eric A. Beck, P.E.
Supervising Sanitary Engineer

EAB:sk

Enclosures

cc: Eric Dodge, Okonite
James Groome, Okonite
David Turin, EPA
Traci Pena, DEM
Annie McFarland, DEM



RESPONSE TO COMMENTS

NO SIGNIFICANT COMMENTS WERE RECEIVED ON THE DRAFT PERMIT FOR THIS FACILITY; THEREFORE, NO RESPONSE WAS PREPARED.

HEARING REQUESTS

If you wish to contest any of the provisions of this permit, you may request a formal hearing within thirty (30) days of receipt of this letter. The request should be submitted to the Administrative Adjudication Division at the following address:

Bonnie Stewart, Clerk
Department of Environmental Management
Office of Administrative Adjudication
235 Promenade Street, 3rd Floor
Providence, Rhode Island 02908

Any request for a formal hearing must conform to the requirements of Rule 49 of the State Regulations.

STAYS OF RIPDES PERMITS

Should the Department receive and grant a request for a formal hearing, the contested conditions of the permit will not automatically be stayed. However, the permittee, in accordance with Rule 50, may request a temporary stay for the duration of adjudicatory hearing proceedings. Requests for stays of permit conditions should be submitted to the Office of Water Resources at the following address:

Angelo S. Liberti, P.E.
Chief of surface Water Protection
Office of Water Resources
235 Promenade Street
Providence, Rhode Island 02908

All uncontested conditions of the permit will be effective and enforceable in accordance with the provisions of Rule 49.