



RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

August 29, 2005

CERTIFIED MAIL

Mr. John Carroll, CEO
ATP Manufacturing, LLC
761 Great Road
North Smithfield, RI 02896

**RE: ATP Manufacturing, LLC
RIPDES No. RI0000566**

Dear Mr. Carroll,

Enclosed is your final Rhode Island Pollutant Discharge Elimination System (RIPDES) Permit modification. State regulations, promulgated under Chapter 46-12 of the Rhode Island General Laws of 1956, as amended, require this modification to become effective on the date specified in the modification. No significant comments were received on the draft permit modification for this facility; therefore, no response to comments was prepared. The issuance of this permit modification satisfies the requirements of consent agreement RIA-354, which was entered into between ATP Manufacturing and the Department of Environmental Management, and effectively resolves ATP Manufacturing's appeal of the RIPDES permit that was issued on September 15, 2004.

We appreciate your cooperation throughout the development of this permit. Should you have any questions concerning this permit, feel free to contact Joseph Haberek, P.E. of the RIPDES Staff at 401-222-4700, extension 7715.

Sincerely,

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

EAB:JBH/jbh

Enclosures

cc: EPA Permits Branch, Region 1
Annie McFarland, DEM
Bonnie Stewart, DEM
Dennis Parenteau, ATP Manufacturing, LLC

MODIFICATION

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, RIPDES Permit No. RI0000566 issued to ATP Manufacturing, LLC on September 15, 2004, shall be modified as follows:

The Average Monthly flow and Average Monthly quantity limits for BOD and TSS from Part I.A.1 of the permit, shall be deleted and replaced with the limits from Part I.A.1 in Attachment A of this Modification.

The Average Monthly and Maximum Daily Total Residual Chlorine (TRC) limits from Part I.A.2 of the permit, shall be deleted and replaced with the limits from Part I.A.2 in Attachment B of this Modification.

The remaining effluent limitations, monitoring requirements and other conditions in the original permit are unchanged and in effect.

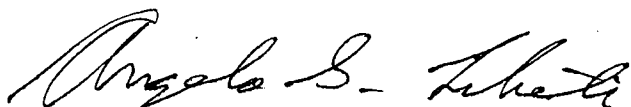
This modification shall become effective on the date of signature.

This permit and the authorization to discharge expire at midnight, December 1, 2009.

This change modifies the permit issued on September 15, 2004.

This modification consists of three (3) pages.

Signed this 29th day of August, 2005.



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

PART I

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) 001A.

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

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Concentration - specify units</u>		<u>Monitoring Requirement</u>	
	<u>Average Monthly</u>	<u>Quantity - lbs./day Maximum Daily</u>	<u>Average Monthly</u> *(Minimum)	<u>Average Weekly</u> *(Average)	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow	0.004 MGD	--- MGD			Continuous	Recorder
BOD ₅	1.00		30 mg/l	45 mg/l	1/Week	24-Hr. Comp.
BOD ₅ -% Removal	85 %				1/Month	Calculated
TSS	1.00		30 mg/l	45 mg/l	1/Week	24-Hr. Comp.
TSS - % Removal	85 %				1/Month	Calculated
Settleable Solids ¹			--- ml/l	--- ml/l	1/Day	Grab

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

All BOD₅ and TSS samples shall be taken on the influent and effluent with appropriate allowances for hydraulic detention (flow-through) time. Sampling for BOD₅, TSS and SS shall be performed Monday through Friday.

¹ Settleable solids monitoring has been included as a process-control parameter to aid in the assessment of the operation of the plant but no effluent limit has been established.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: Outfall 001A (final discharge from the treatment facility prior to discharge into the Branch River).

ATTACHMENT B

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. During the period beginning on the effective date and lasting through permit expiration, the permittee is authorized to discharge from outfall serial number(s) 001A.

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

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u> Quantity - lbs./day		Concentration - specify units		<u>Monitoring Requirement</u>	
	<u>Average Monthly</u>	<u>Maximum Daily</u>	<u>Average Monthly</u> *(Minimum)	<u>Average Weekly</u> *(Average)	<u>Measurement Frequency</u>	<u>Sample Type</u>
Fecal Coliform			200 MPN ¹ 100 ml	400 MPN 100 ml	1/Week	Grab
Total Residual Chlorine (TRC) ²			1.06 mg/l	1.84 mg/l	1/Day	Grab
pH			(6.5 S.U)	(9.0 S.U)	2/Day	Grab

¹The Geometric Mean shall be used to obtain the "monthly average."

²Compliance with these limitations shall be determined by taking one (1) grab sample per day, Monday - Friday (except holidays). The maximum daily and average monthly values are to be computed from the grab sample results for each day. The following methods may be used to analyze the grab samples: (1) DPD spectrophotometric, EPA No. 330.5 or Standard Methods (18th Edition) No.4500-CI G; (2) DPD Titrimetric, EPA No. 330.4 or Standard Methods (18th Edition) No. 4500-CI F; (3) Amperometric Titration, EPA No. 330.1 or Standard Methods (18th Edition) No. 4500-CI D or ASTM No. D1253-86(92); (4) Iodometric Direct Titration, EPA No. 330.3 or Standard Methods (18th Edition) No. 4500-CI B; (5) Iodometric Back Titration (either end-point), EPA No. 330.2 or Standard Methods (18th Edition) No. 4500-CI C.

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

Sampling for Fecal Coliform, pH and Chlorine Residual shall be performed Monday-Friday.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: Outfall 001A (final discharge from the treatment facility prior to discharge into the Branch River).

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. **RI0000566**

NAME AND ADDRESS OF APPLICANT:

ATP Manufacturing, LLC
761 Great Road
North Smithfield, Rhode Island 02896

NAME AND ADDRESS OF FACILITY WHERE DISCHARGE OCCURS:

ATP Manufacturing, LLC
Route 146-A
North Smithfield, Rhode Island 02896

RECEIVING WATER: **Branch River**

CLASSIFICATION: **B**

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

The above named facility, which is a package, wastewater treatment plant located at Route 146-A, North Smithfield, Rhode Island, applied to the Rhode Island Department of Environmental Management (DEM) for reissuance of a RIPDES permit to discharge into the designated receiving water. The permit was reissued on September 15, 2004 and included water quality based permit limits for Total Residual Chlorine (TRC). The facility could not comply with the TRC limit, therefore, they appealed the permit limit. To resolve the permit appeal, the permittee has agreed to a decreased flow limit, which will result in increased dilution and an increased water quality-based permit limit for TRC and lower mass-based permit limits for BOD and TSS. This permit reflects the new limits for flow, TRC, BOD, and TSS.

II. Limitations and Conditions

The proposed effluent limitations and monitoring requirements may be found in the draft permit. Historical average effluent concentrations may be found in attachment A.

III. Permit Basis and Explanation of Effluent Limitation Derivation

The ATP Manufacturing, LLC wastewater treatment facility is a secondary treatment facility located at Route 146-A, North Smithfield, Rhode Island. The discharge, which flows into the Branch River consists of treated sanitary wastewater. The wastewater treatment system consists of settling, aeration, BioMatrix filtration, and the addition of chlorine for disinfection. This permit modification changes the permitted flow rate from 0.006 million gallon per day (MGD) to 0.004 MGD.

Water Quality Based Permit Limitations

The allowable water quality based 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 August 6, 1997 Rhode Island Water Quality Regulations, as amended. Aquatic life criteria have been established to ensure the protection and propagation of aquatic life while human health criteria represent the pollutant levels that would not result in a significant risk to public health from ingestion of aquatic organisms. The more stringent of the two criteria was then used in establishing allowable effluent limitations.

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 at ungaged sites, a regression equation is used which describes the relation between the 7Q10 flow at gaging stations and the percentage of the upstream drainage area underlain by coarse-grained stratified drift and till-covered bedrock. Using this procedure, the 7Q10 flow for this site was determined to be 0.592 ft³/s. The dilution factor (DF) used to establish the allowable water quality based discharge concentrations was then determined using the following equation:

$$DF = \frac{Q_D + Q_{wwtf}}{Q_{wwtf}}$$

Where:

DF	= Dilution Factor
Q _D	= Design Flow (Receiving Water 7Q10 Flow)
Q _{wwtf}	= Flow at WWTF

The "Monthly Average" and "Daily Maximum" TRC limits were based on a 100% allocation, a zero background concentration, and the new dilution factor of 96.65 (up from a dilution factor of 64.76 at the previous design flow of 0.006 MGD). The 100% allocation factor for TRC was used due to the non-conservative nature of chlorine and the improbability of the receiving water having a detectable background TRC concentration. Using this procedure, the new average monthly and daily maximum TRC limits have been set at 1.06 mg/L and 1.84 mg/L.

Conventional Pollutants

In addition, to changing the TRC limits, the new flow limit also has an impact on the average monthly quantity limits for BOD and TSS. Since these limits are calculated by converting the concentration limit to an equivalent mass limit using the design flow, the average monthly quantity limits for BOD and TSS have changed from 1.51 lbs/day to 1.00 lbs/day.

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. Section 303(d)(4) of the Clean Water Act addresses water quality based antibacksliding in terms of water quality based limits. Since none of the permit limits, both concentration and mass loadings, are less stringent than final limits in the previous permit, antibacksliding regulations are being met. Additionally, 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 or increase in flow. Therefore, as there will be no increase in loadings or flow to the receiving waterbody, no additional antidegradation review is necessary. It should be noted that, since the TRC limits from the previous permit were appealed, they were never actually final and in effect. Therefore, modification of the TRC limits is allowable under the Antibacksliding and Antidegradation Provisions.

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:

Joseph B. Haberek, P.E.
RIPDES Program
Office of Water Resources
Department of Environmental Management
235 Promenade Street
Providence, Rhode Island 02908
Telephone: (401) 222-4700, extension 7715

6/21/05
Date


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

ATTACHMENT A

DESCRIPTION OF DISCHARGE: treated domestic wastewater.
DISCHARGE: 001A - Treatment Discharge

AVERAGE EFFLUENT CHARACTERISTICS AT POINT OF DISCHARGE OF SELECTED POLLUTANTS:

PARAMETER	MAXIMUM¹	AVERAGE¹
FLOW (MGD)		0.001330 MGD
BOD ₅ (LBS/DAY)		0.054 lbs/day
TSS (LBS/DAY)		0.056 lbs/day
Chlorine Residual	1.77 mg/l	1.06 mg/l

¹Data represents the mean of the daily maximum and monthly average data from June 2004 – December 2004 as reported by the permittee in a December 29, 2004 letter. The data from June 2004 – December 2004 was used since the permittee indicated that they were attempting to minimize chlorine usage during this period.