

BOBBY JINDAL
GOVERNOR



PEGGY M. HATCH
SECRETARY

State of Louisiana
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL COMPLIANCE

*via hand delivery
24 August 2011*

CERTIFIED MAIL (7004 2510 0005 5763 0775)
RETURN RECEIPT REQUESTED

TIN INC.
c/o Corporation Service Company
Agent for Service of Process
320 Somerulos St.
Baton Rouge, LA 70802-6129

**RE: AMENDED CONSOLIDATED COMPLIANCE ORDER &
NOTICE OF POTENTIAL PENALTY
ENFORCEMENT TRACKING NO. WE-CN-11-01062A
AGENCY INTEREST NO. 38936**

Dear Sir:

Pursuant to the Louisiana Environmental Quality Act (La. R.S. 30:2001, et seq.), the attached **AMENDED CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY** is hereby served on **TIN INC. (RESPONDENT)** for the violations described therein.

Any questions concerning this action should be directed to Celena J. Cage at (225) 219-3710.

Sincerely,

A handwritten signature in blue ink that reads "Celena J. Cage".

Celena J. Cage
Administrator
Enforcement Division

CJC/JSK/jsk
Alt ID No. LA0007901
Attachment

**STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL COMPLIANCE**

IN THE MATTER OF

**TIN INC.
WASHINGTON PARISH
ALT ID NO. LA0007901**

**PROCEEDINGS UNDER THE LOUISIANA
ENVIRONMENTAL QUALITY ACT,
La. R.S. 30:2001, ET SEQ.**

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* **ENFORCEMENT TRACKING NO.**
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* **WE-CN-11-01062**
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* **AGENCY INTEREST NO.**
*
* **38936**
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**AMENDED CONSOLIDATED COMPLIANCE ORDER &
NOTICE OF POTENTIAL PENALTY**

The Louisiana Department of Environmental Quality (the Department) hereby amends **CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY, ENFORCEMENT TRACKING NO. WE-CN-11-01062**, issued to **TIN INC. (RESPONDENT)** on August 22, 2011, in the above-captioned matter as follows:

I.

The Department hereby adds paragraph VII to the Compliance Order section to read as follows:

“VII.

To prevent unplanned discharges during rain events, protect water quality, maintain the biological health of the wastewater treatment system, and to start-up the mill’s essential utility operations and internal cooling water systems, approval is hereby granted to start-up the Bogalusa Effluent Treatment System in accordance with Attachment 1- Bogalusa Mill Aerated Stabilization Basin start-up Discharge Plan. The Respondent shall comply with the following conditions during these activities:

- A. The Respondent shall receive written approval to discharge from the Office of Environmental Compliance, Enforcement Division, prior to operations and discharge.

- B. The Respondent shall verbally notify Mike Algero and Jeff Dauzat with the Department’s Southeast Regional Office (SERO) no less than twenty-four hours (24 hours) prior to commencement of activities at the following contact telephone numbers and e-mail addresses: Mike Algero: (225) 329-9745 and mike.algero@la.gov; Jeff Dauzat: (504) 451-7577 and jeff.duazat@la.gov.
- C. The Respondent shall also verbally and electronically notify the following individuals no less than twenty-four hours (24 hours) prior to commencement of activities approved under this section of the Order:

Name	Representing	Telephone	Email address
Dexter Accardo	St. Tammany Parish OEP	(985) 264-1087	daccardo@stpgov.org
Tommy Thiebaud	Washington Parish OEP	(985) 516-7008	tthiebaud@wpgov.org
Chris Guilbeaux	GOHSEP	(225) 715-3191	Christopher.Guilbeaux@la.gov
Pat Santos	GOHSEP	(225) 938-7218	Pat.Santos@la.gov
David Thomas	DHH, OPH	(985) 871-1300	David.Thomas@LA.GOV
Ken Litzenberger	U.S. Fish and Wildlife Service	(985) 285-3335	kenneth_litzenberger@fws.gov
Cathy Wells	Senate Committee on Environmental Quality	(225) 772-8609	wells@legis.state.la.us
Senator J. P. Morrell	Senate Committee on Environmental Quality	(504) 261-0535	morrelljp@legis.state.la.us
Nick Gatian	MS DEQ	(228) 493-7135	nick_gatian@deq.state.ms.us
Jackie Key	MS DEQ	(769) 798-5958	jackie_key@deq.state.ms.us
Danny Manley	Pearl River County EMA	(601) 273-1394	dmanley@pearlrivercounty.net

The Respondent shall also provide electronic updates every twenty-four hours (24 hours) thereafter. These updates shall be provided for the first two weeks after initiation of the discharge.

- D. The Respondent shall submit weekly progress reports of the Bogalusa Effluent Treatment System start-up activities, including the results of all sampling events to the Department and the contacts listed in the previous section. The results of all sampling performed during this incident shall be submitted to the Department on a Discharge Monitoring Report (DMR). The weekly progress reports and DMRs shall be submitted no later than the Wednesday of the week following the effective date of this Order. **COMPLIANCE ORDER WE-CN-11-01062A, AGENCY INTEREST NO. 38936, and LA0007901** should be referenced on all DMRs submitted in accordance with this **COMPLIANCE ORDER**.

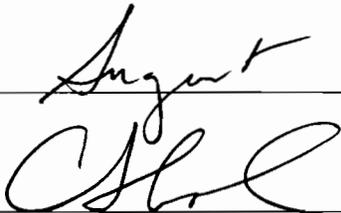
- E. The Respondent shall submit a final written report to the Department within five (5) working days of completing the activities approved under this section of this **COMPLIANCE ORDER**.
- F. The Respondent shall comply with all other requirements of LPDES permit LA0007901.
- G. The Department will consider any noncompliance that occurs during implementation of the Bogalusa Mill Aerated Stabilization Basin Start-up Discharge Plan a violation of this **COMPLIANCE ORDER**.”

The Department incorporates all of the remainder of the original **CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY, ENFORCEMENT TRACKING NO. WE-CN-11-01062** and **AGENCY INTEREST NO. 38936** as if reiterated herein.

III.

This **AMENDED CONSOLIDATED COMPLIANCE ORDER & NOTICE OF POTENTIAL PENALTY** is effective upon receipt.

Baton Rouge, Louisiana, this 24 day of August, 2011.



Cheryl Sonnier Nolan
Assistant Secretary
Office of Environmental Compliance

Copies of a request for a hearing and/or related correspondence should be sent to:

Louisiana Department of Environmental Quality
Office of Environmental Compliance
Enforcement Division
Post Office Box 4312
Baton Rouge, LA 70821-4312
Attention: Celena J. Cage

Attachment 1
Bogalusa Mill
Aerated Stabilization Basin Start-up Discharge Plan

Background

Following the shutdown of the Bogalusa Mill on August 14, 2011, the Aerated Stabilization Basin (ASB) has been isolated, with no discharge. To treat the remaining high concentrations of Biochemical Oxygen Demand (BOD₅), pumps were installed to recirculate wastewater from the settling zone of the ASB (downstream end) back to the upstream end where the aerators are located. This recirculation is on-going and continues to treat the wastewater while the ASB is isolated.

Since the shutdown of the Mill, the ASB has remained nearly full with no discharge. Presently there is a small amount of volume available, approximately 4 to 5 inches of depth. Because the site storm water is routed to the ASB for treatment, this minimal available volume would be filled by a one to two inch rainfall. In the event of a larger rainfall, it would not be possible to prevent a discharge to the Pearl River.

To provide additional storage volume for larger rainfall events, a safe and controlled discharge of some of the treated wastewater in the ASB is required. This will allow larger rainfall amounts to be contained in the ASB without causing an uncontrolled discharge.

In addition to providing rainfall retention, volume for cooling water is needed. Certain equipment and electronics in the production areas are climate controlled with systems that use cooling water. This equipment has been shut down and the cooling systems need to be re-started to protect the equipment and electronics from damage resulting from the heat and humidity.

This plan presents the approach proposed for increasing the storage available for rainfall and cooling water by discharging treated wastewater from the ASB in a safe and controlled manner within the permit limits and the Pearl River is protected.

Discharge Approach

The outlet structure on the west end of the ASB will be opened after the Louisiana Department of Environmental Quality (LDEQ) has approved the plan and advanced notification (at least 24-hours prior to discharge) has been made. The treated wastewater will flow from the ASB into the outlet structure and through the pipe connecting the other outlet structures together before flowing to the Pearl River through our normal discharge point.

The treated wastewater discharge will be monitored at the ASB and in the Pearl River. Due to safety issues with monitoring in the river after sunset, treated wastewater will only be discharged from the ASB between sunrise and sunset at the onset.

Discharge Characteristics and Pearl River Modeling

The initial flow rate and BOD₅ of the treated wastewater to be discharged are discussed below. These values were used in a spreadsheet-based river model to estimate the effects of the treated wastewater discharge on the dissolved oxygen level in the Pearl River. A conservative approach with a variety of safety factors was used in choosing the flow rates and BOD₅ values that were used in the model to ensure the approach is protective of the Pearl River and the discharge meets the permit. This means that once the actual discharge takes place, the resulting treated wastewater characteristics will be better than the conditions included in the model.

Two conditions were modeled. The first, and most conservative, used a high-end BOD₅ value at the largest initial flow rate that might result due to a large rainfall event prior to opening the gate. The second used a more likely, but still conservative, BOD₅ at the lower initial flow rate.

Flow Rate

The initial flow rate of the treated wastewater discharge from the ASB will depend largely on the water level in the ASB at the time the discharge is started. This is due to actions taken by the Mill to temporarily increase the storage volume provided by the ASB and to prevent any discharge. At the current water level, the resulting initial flow rate would be approximately 2.1 million gallons per day (MGD) rate. If enough rain were to fill up the ASB completely before the discharge was started, the largest initial flow rate that would result would be approximately 6.0 MGD. We will discharge at a rate between 2 and 6 MGD during daylight hours, for a total discharge between 1 and 3 million gallons the first day. After the second day of this carefully monitored discharge, again depending on rainfall if any, we will review the data with our consultants and if it is determined that an adjustment to flow rate can or should be made, then we will consult with LDEQ prior to making the appropriate adjustments. LDEQ will vet the proposed changes through stakeholders, including St Tammany Parish and Washington Parish for their review and approval, prior to giving approval for any changes. The freeboard gained will allow rainfall and the select mill cooling water flows to enter the pond without uncontrolled discharge. Permit compliance and protection of the Pearl River will be maintained at all times. Once the water level in the ASB has dropped below the normal maximum level, the flow rate can be more easily controlled at the outlet structure.

Ultimately, the Mill will need to transition to a continuous (24-hour per day) discharge. This will not occur without prior approval from the LDEQ. LDEQ will vet the proposed

changes through stakeholders, including St Tammany Parish and Washington Parish for their review and approval, prior to giving approval for any changes.

The actual mill startup will be covered in a separate plan submitted to the Department for approval following review and approval by stakeholders, including St Tammany Parish and Washington Parish.

Biochemical Oxygen Demand

Recirculation of the wastewater in the ASB has continued to provide treatment, further reducing the BOD₅ since the shutdown. Because the required BOD₅ testing takes a significant amount of time (5 days), the data used in the development of this plan was several days old. As such, it is higher than the more recent tests have shown as the treatment continues to reduce the BOD₅. This means that the BOD₅ concentrations used in the plan and associated river modeling are higher than the current concentrations and concentrations expected at the time of discharge.

Due to the time length required to perform a BOD₅ test, additional parameters will be measured to provide more timely results such as BOD₁, COD, pH, and conductivity.

Based on the available data, a conservative high-end BOD₅ value of 430 mg/L was chosen for use in the model at the largest initial flow rate. At the 6 MGD flow rate, the resulting 24-hour BOD₅ load would be approximately 22,000 pounds. A more likely, but still conservative, value of 180 mg/L was chosen for modeling at the lower initial flow rate. At the 2.1 MGD flow rate, the resulting 24-hour BOD₅ load would be approximately 3,000 pounds. As indicated previously for the flow rate and actual volume discharged, during the initial startup the actual pounds of BOD₅ discharged will be approximately one-half of the amounts shown due to the self-imposed sunrise to sunset operational limitation.

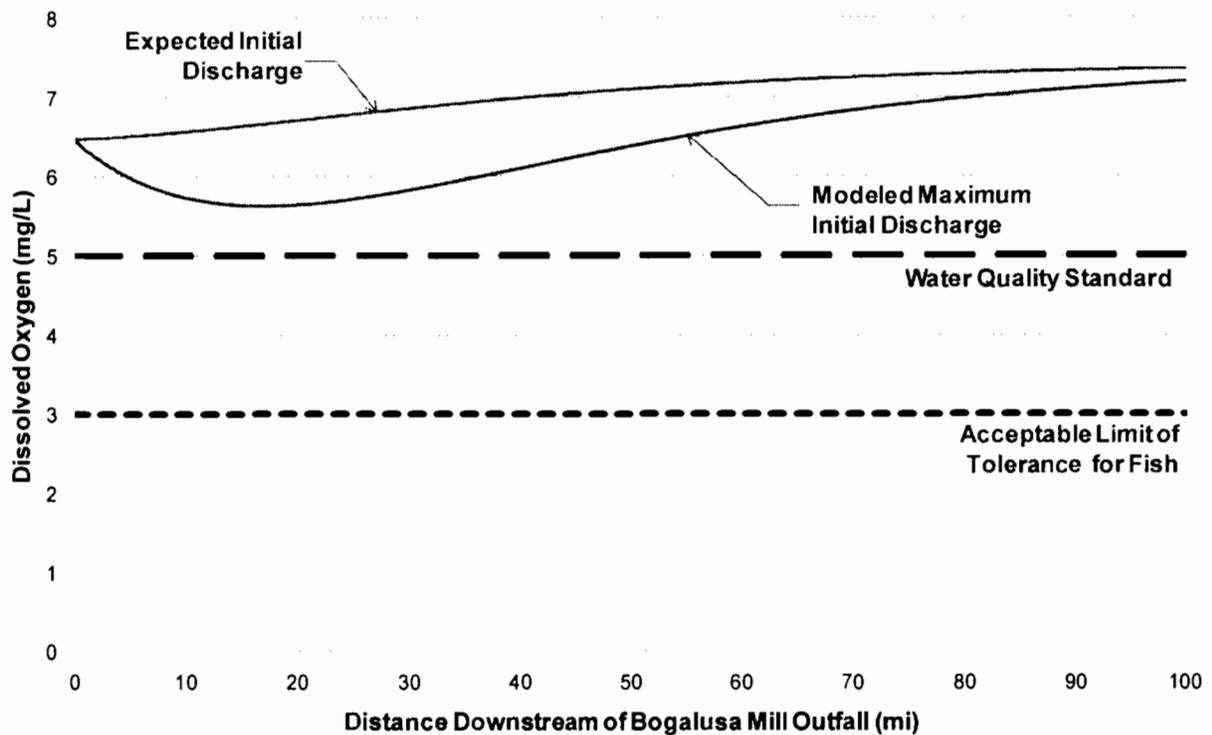
Pearl River Dissolved Oxygen Modeling

Additional Assumptions

In addition to the BOD₅ concentrations used, the full theoretical oxygen demand associated with the measured ammonia-nitrogen concentration in the ASB was added to the BOD₅ for modeling. This was done for both model scenarios. There were several other conservative assumptions made in the modeling, for example the use of an upstream Pearl River dissolved oxygen (DO) level of 6.5 mg/L (recent data has shown values up to 7.5 mg/L), and zero (0 mg/L) for the treated wastewater to be discharged.

Model Results

The figure below shows the results for the two conditions modeled. The vertical axis shows the DO concentration in the Pearl River. The horizontal axis shows the distance downstream of the discharge location. The dashed line shows the water quality standard for the Pearl River. The maximum initial discharge curve shows that even with the numerous conservative assumptions and safety factors applied, the minimum projected DO level in the Pearl River is still safely above the water quality standard. Further, at the more likely (but still conservative) initial discharge condition, there is no reduction anticipated in DO level in the Pearl River.



Monitoring Plan

To further protect the Pearl River, additional monitoring of the treated wastewater being discharged and the Pearl River will be conducted. The table below identifies the locations and frequencies of the measurements to be monitored, as well as the responsible party. In addition, action levels are shown where applicable. If the levels shown are reached, the outlet structure will be closed and the discharge will be stopped.

Summary of Proposed Monitoring During Discharge of Lagoon

Test Location	Test	Responsible Party	Current Frequency	Startup Frequency	Action Level
Pearl River ¹	DO	EBS ⁴	1/Quarter	Every 4 hours ²	1. Rapid rate of decline in measured DO (engineering judgment) 2. DO measured \leq 5.5 mg/L 3. Real-time modeled river conditions show an unacceptable DO sag
	pH	EBS	1/Quarter	Every 4 hours ²	NA
	Conductivity	EBS	1/Quarter	Every 4 hours ²	NA
Outfall	TSS ³	Mill/EBS	3/week but doing 5/week	7/Week	NA
	pH	Mill/EBS	3/week	Continuous ⁵	8.9
	BOD ₅	Mill/EBS	3/week	7/week	NA
	DO	Mill/EBS	NA	Every 4 hours ²	NA
	DOUR	EBS	2/week	7/week	>6mg/L/hour
	BOD ₁	Mill/EBS	7/week	7/week	NA
	COD	Mill/EBS	7/week	Every 4 hours ²	NA
	Conductivity	Mill/EBS	NA	Every 4 hours ²	NA
Mid-ASB (East Pond Rainbird)	Microscopic Maturity Index	EBS	1/week	1/week	<1.1
	DOUR	EBS	2/week	7/week	>6mg/L/hour
	Microscopic Maturity Index	EBS	1/week	7/week	< 1.1
	Nutrients - P	EBS	1/week	7/week	NA
	Nutrients - N	EBS	1/week	7/week	NA
	pH	EBS	1/week	7/week	NA
	Conductivity	Mill/EBS	NA	Every 4 hours ²	
	DO	Mill/EBS	NA	Every 4 hours ²	
COD	Mill/EBS	NA	Every 4 hours ²		

1. Locations of Pearl River sampling:

Location	Latitude	Longitude
Below Mouth of Coburn Creek (upstream of outfall, below mouth of Coburn Creek)	30°46.579' N	89°49.752' W
Mill Outfall	30°46.563' N	89°49.681' W
Richardson Landing (~1 mile below outfall)	30°45.751' N	89°49.845' W
Above Walnut Bluff (~4 miles below outfall)	30°43.602' N	89°50.115' W
Above Pools Bluff (~8 miles below outfall)	30°42.531' N	89°50.533' W
Maximum model sag (~17 miles below outfall)	30°39.124' N	89°50.449' W
Above split in Pearl River (~30 miles below outfall)	30° 34.132' N	89°48.456' W
Walkiah Bluff (~32 miles below outfall)	30°34.223' N	89°47.376' W
I-59 crossing at Pearl River (Crawfords Landing) (~49 miles below outfall)	30°23.027' N	89°44.142' W

2. Discharge and monitoring will only be performed during daylight hours.
3. TSS – Total Suspended Solids
4. EBS – Environmental Business Specialists, LLC
5. Continuous monitor will be in place at the outfall and grab samples will be performed approximately every 4-hours for verification

The action levels for dissolved oxygen in the Pearl River are described in further detail below:

- 1) Rapid rate of decline in measured DO – Based on three consecutive readings at the same location that demonstrate declining DO concentrations in the river at a rate faster than predicted by the maximum initial discharge model and suggesting the potential of going below the water quality standard (5.0 mg/L) the discharge will be stopped.
- 2) DO measured at 5.5 mg/L or below – regardless of the rate of decline, the discharge will be stopped if the measured DO downstream of the discharge drops below 5.5 mg/L (still above the water quality limit). The only exception would be if the river DO upstream of the discharge is between 5.5 and 6.0 mg/L and the rate of decline in the DO downstream of the discharge is matched by a decline in the DO upstream of the discharge.
- 3) Real time modeled river conditions show unacceptable DO – the river model will be used with the previous BOD₁ measurements and upstream river DO

measurements to model the projected river DO. If the model predicts a DO below 5.0 mg/L, the discharge will be stopped.