# BATON ROUGE SSO PROGRAM 2002 CONSENT DECREE



# **2007 ANNUAL REPORT**

January 29, 2008

### **Department of Public Works**



City of Baton Rouge Parish of East Baton Rouge

Post Office Box 1471 Baton Rouge, Louisiana 70821

January 29, 2008

#### CERTIFIED – RETURN RECEIPT REQUESTED

Chief,

Water Enforcement Branch (6EN-W) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region VI 1445 Ross Avenue Dallas, Texas 75202-2733

Re: City of Baton Rouge and Parish of East Baton Rouge Consent Decree-Civil Action No. 01-978-B-M3 Annual Report - **Period Ending December 31, 2007** 

#### Gentlemen:

Pursuant to Paragraph 52 of the Consent Decree, the City of Baton Rouge and Parish of East Baton Rouge hereby submits the Annual Report covering activities for the year ending December 31, 2007. This report addresses the following items:

- Remedial Measures Action Plan (RMAP)
- Treatment Facility Assessment
- Environmental Results Monitoring (ERM)
- Interim Relief Measures Activities
- Outreach and Public Awareness Program
- Plan Modification Needs
- Stipulated Penalties

These items are described in Sections XII, XIII, XIV, XVI, XV and XXI of the Consent Decree.

I certify that the information contained in or accompanying this document is true, accurate and complete. As to identified portions of this document for which I cannot personally verify their

Mr. Peter Newkirk January 29, 2008 Page 2

truth and accuracy, I certify as the official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification, that this is true, accurate and complete.

Sincerely,

Peter T. Newkirk

Director of Public Works

Honorable Melvin L. "Kip" Holden, Mayor-President Cc: Mr. Walter Monsour, Chief Administrative Officer Mr. Bruce Hammatt, LDEQ Chief, Environmental Enforcement Section, US DOJ Ms. Mona Tates, US EPA Region 6 Mr. Carlos Zequeira, (6RC-EA) Ms. Gladys Gooden-Jackson, EPA (6EN-WC) Mr. Bruce Hammatt, LDEQ Ms. Peggy Hatch, LDEQ Mr. Harold Leggett, LDEQ Mr. Wade Shows, Parish Attorney's Office Mr. Bryan Harmon Mr. Mark LeBlanc Mr. Richard Wright Mr. Walter Jenkins Mr. David Ratcliff Ms. Cheryl Berry

Mr. Jim Hawley, CH2MHILL

# BATON ROUGE SSO PROGRAM 2002 CONSENT DECREE



# **2007 ANNUAL REPORT**

January 29, 2008

## CITY-PARISH DEPARTMENTAL MEMORANDUM WASTEWATER TREATMENT AND DISPOSAL DIVISION

2443 River Road Baton Rouge, LA 70802

#### Date: January 29, 2008

To: Mr. Bryan Harmon, Chief Engineer Mr. Rick Wright, Senior Projects Engineer

From: Mrs. Karen E. Johnson, CH2M HILL

Re: City of Baton Rouge and Parish of East Baton Rouge Consent Decree-Civil Action No. 01-978-B-M3 2007 Annual EPA Report Data Review

#### Gentlemen:

Draft copies of the above referenced report have been submitted for your review. This review is to insure that the data submitted under your direction, has been stated in a truthful and accurate manner in the 2007 Annual EPA Report. Once the review of your portion of data is complete and corrected, please sign below the paragraph stating that fact and return for processing.

Sincerely, Karen Johnson, PE Regulatory Coordinator/CH2M HILL

I certify that the information contained in or accompanying the portion of the 2007 Annual EPA Report that I am responsible for is true, accurate, and complete. As to those identified portions of this document for which I cannot personally verify their truth and accuracy, I certify as the official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification, that this is true, accurate and complete.

Document Control

cc:

## BATON ROUGE SSO PROGRAM 2002 CONSENT DECREE

## **2007 ANNUAL REPORT**

January 29, 2007

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Attachment B – IAP Projects Summary Report

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# Baton Rouge Consent Decree 2007 Annual Report

This Annual Report covering the period from January 1, 2007 to December 31, 2007 is submitted in accordance with Paragraph 52 of the Consent Decree. The report addresses all items identified in Consent Decree Exhibit I regarding the Annual Report format and content.

## I Remedial Measures Action Plan (RMAP)

The City/Parish originally developed a comprehensive remedial action plan for the collection system during consent decree negotiations, identified as Alternative 1 (the original SSO Plan) in the Consent Decree. Shortly thereafter, a Value Engineering (VE) study was commissioned in order to explore cost-saving alternatives. The VE study identified seven options of the original SSO Plan for further considerations. Three of those alternatives (3, 4 and 7) were considered equivalent low-cost options that deemed further examination. Through a series of Metro Council and public meetings, Alternative 7, the Composite Plan, was selected. At the time, the Program Manager for the work associated with the Composite Plan was Montgomery Watson Harza (MWH). The focus of this plan was to utilize deep tunnels in order to store flows throughout the wastewater collection system during high flow/wet weather conditions in order to eliminate SSOs throughout the City/Parish during the design storm.

The Composite Plan consisted of two (2) parts: the First Remedial Measures Action Plan (RMAP) and Second RMAP. The First RMAP (or RMAP1), submitted on January 10, 2001, consisted of the projects that were common to all three lowest cost VE options (3, 4, and 7) being evaluated. Since that time, several of these projects have been completed, some have been postponed indefinitely, and others have been reevaluated or their scope has been slightly altered. A detailed RMAP1 Status Report was submitted to the EPA and LDEQ in December 2007 that summarized the status to date of all of the RMAP1 projects (See Attachment A for more details). Approximately nine of the total nineteen projects were completed according to the original schedule. This report included a formal "Request for Time Extension" for those RMAP1 projects not yet completed, and a corresponding schedule for project completion. This schedule is pending EPA and LDEQ approval. However, the current status of the RMAP1 projects that are currently in progress is shown in Exhibit 1.

<b>Ongoing RMAP1 Projects</b>	Status
Industriplex Area Upgrades	Program team has reviewed the construction plans and specifications. Review comments have been submitted to the design consultant. The design consultant is scheduled to finalize the design in January 2008 and the project bid opening will follow.
Kleinpeter Area Upgrades	Additional improvements have been added to the project, such as new pump station force main, and gravity sewer. These improvements will be included in Phase II of the project. The design consultant is in the process of finalizing the Phase I construction plans and bid documents by the first quarter of 2008. The design consultant plans to submit a proposal for engineering services for the rest of the Phase I design and entire Phase II design.

**EXHIBIT 1** RMAP1 Project Status Summary

### EXHIBIT 1

**RMAP1** Project Status Summary

Ongoing RMAP1 Projects	Status
PS 136 Area Upgrades	Approximately 75% of the design work has been completed. The City/Parish DPW is in the process of reviewing and approving proposed design modifications.
North Sewer Rehab Project	Construction was completed on 11/30/2007.
PS 49/52 Area Upgrade	80% completed with construction. DPW is in legal dispute with Contractor and is still trying to work out a negotiation for completion of the rest of the construction work.

The Second RMAP (RMAP2), that was originally submitted on November 19, 2002, consisted of the projects required to complete the selected overall remedial action plan, Alternative 7. As the planning and design activities for the RMAPs progressed, it was apparent that modifications to the project definitions and schedules were necessary. Therefore, on December 3, 2004, proposed RMAP modifications were submitted for review and approval.

In early 2005, the City/Parish began re-evaluating Alternative 7 of the original Composite Plan, due to large budget over runs of several projects that were indicative of total project cost increases of 50% or more. Camp Dresser &McKee (CDM) was hired to do a preliminary evaluation of alternatives and the City/Parish developed an "updated" Second RMAP approach or revised RMAP2 based on more aggressive sewer rehabilitation and comprehensive upgrades of pumping stations. The City/Parish, in conjunction with CDM, submitted a written request with proposed RMAP2 modifications for review and approval to the EPA and LDEQ on July 29, 2005. The City/Parish conducted a telephone conference with EPA and LDEQ on August 1, 2005 in order to present the program status. That presentation included the requested revision to the RMAP2 with the sewer system rehabilitation focus CDM helped develop. The requested plan modification represented a material change in the currently approved RMAP2 (based on Alternative 7), though the requested revision to the RMAP2 did not actually extend the final compliance date beyond the January 1, 2015 deadline for Alternative 7, listed in the Consent Decree. However, complications and shortages associated with the aftermath of Hurricanes Katrina and Rita, delays in plan approvals, and continuing construction cost escalation and material shortages may result in a future documented request for a time extension. At this time the City/Parish is making every reasonable effort to complete the work to meet the original deadline and has focused additional efforts and resources to accelerate treatment plant improvements to achieve consistent permit compliance.

The original revised RMAP2, submitted by the City/Parish and CDM, hadn't yet been approved by the EPA and LDEQ in early 2006 when the City/Parish engaged CH2M HILL to conduct a peer review and address issues about some elements of the plan including the South Treatment Plant proposed work. Based on the peer review recommendations, a re-submittal, and the second request for approval, of the Revised RMAP2 modifications (including CDM's plan and CH2M HILL's updated plan for South Wastewater Treatment Plant compliance projects) was submitted by the City/Parish in conjunction with CH2M HILL on December 12, 2006. CH2M HILL was also selected as the new program manager during this timeframe. CH2M HILL included the following technical memorandum as a part of this submittal: "Addressing Existing Noncompliance Issues and Future Wet-Weather Flow Management Requirements for the South Wastewater Treatment Plant – Summary of Findings and Recommendations". In addition, per EPA and LDEQ request, a more descriptive follow-up report was submitted in January 2007 titled "South Wastewater Treatment Plant Immediate Action Plan Basis of Design Report" that detailed the recommendations outlined in the previous related technical memorandum. On July 10, 2007 the EPA and LDEQ sent a formal letter of approval to the City/Parish endorsing the December 2006 Revised Second RMAP proposal, now referenced formally as RMAP2.

During the past year, a huge planning/engineering effort has been underway by the City/Parish and the Program Manager/CH2M HILL and others in order to provide a detailed RMAP2 Schedule and Cost Estimate based on three types of projects: comprehensive sewer rehabilitation, capacity improvements, and wastewater treatment/storage improvements. This planning and preliminary engineering effort consisted of refined modeling and calibration, detailed calculations, review of field data, and project development, prioritization, and cost estimating. RMAP2 outlines the projects planned to eliminate SSO's throughout the City/Parish, in addition to describing the projects planned in order to meet permit requirements at the wastewater treatment plants. A schedule and budget for these projects is also included in the report. The Updated Second RMAP was submitted to the City/Parish DPW in December 2007 for review and approval. The RMAP2 plan developed by CH2M HILL was presented to the City Council on January 10, 2008. Once it is approved by DPW following the Council presentation, it will be submitted to the EPA and LDEQ early in 2008. The proposed plan represents a substantial commitment to meet the demanding schedule required by the Consent Decree (January 1, 2015) and may not be achievable should any force majeur event or unanticipated delays occur. The proposed schedule was based on optimum engineering design schedules and assumptions and favorable construction conditions.

During the past year, the City/Parish submitted an Immediate Action Plan (IAP) project summary report and schedule in October 2007, per EPA and LDEQ request. See Attachment B for more details. This letter summarized the five (5) IAP projects and also provided a detailed schedule for each. These (IAP) projects have been identified to enable the South Wastewater Treatment Plant (SWWTP) meet their National Pollution Discharge Elimination System (NPDES) permit limits as quickly as possible addressing significant design deficiencies in the current processes. Two projects are in the final design phase and the other three are in the preliminary design phase. All projects are on track for meeting the schedules proposed in the October 2007 IAP report and schedule. Progress of the individual IAP projects is shown in Exhibit 2.

#### EXHIBIT 2

IAP Project Status Summary

IAP Projects	Status				
IAP #1 – SWWTP Screening Improvements	A preliminary design review meeting was held on October 3, 2007 and a follow- up meeting was held on November 3, 2007. Preliminary design review comments were submitted on October 27, 2007. DPW issued Notice to Proceed for design on November 19, 2007. A revised Preliminary Design Report and the draft 60% design are both to be submitted in January 2008.				

#### EXHIBIT 2

IAP Project Status Summary

IAP Projects	Status
IAP #2 – SWWTP Primary Treatment Improvements	Preliminary design review comments submitted on October 25, 2007. A preliminary design review meeting was held on October 30, 2007. A revised Preliminary Design Report was submitted on November 29, 2007. Final design phase fee proposal was reviewed and approved by DPW on December 18, 2007. Design phase contract amendment to be presented to City Council in January 2008. Once contract/fee is approved 60% design will begin.
IAP #3 - SWWTP Trickling Filter Improvements	The preliminary design report was submitted on November 16, 2007. The preliminary design review comments were received on December 11, 2007. A preliminary design review meeting was conducted on December 13, 2007. Responses to the preliminary design review comments were provided on December 21, 2007. There are plans to have another review meeting in January 2008 to discuss comments/responses of the preliminary design in order to finalize the preliminary design.
IAP #4 – SWWTP Effluent Pump Station Stabilization and Repairs	Project kick-off meeting was conducted on October 3, 2007. Drilling and sampling of soil borings conducted on November 30, 20007. Piezometers installed on December 3, 2007. The preliminary design report will be submitted for review in January 2008.
IAP #5 – SWWTP Sludge Handling Improvements	Project kick-off meeting was conducted on October 3, 2007. The preliminary design report was submitted on November 30, 2007. Preliminary design report review comments were submitted on December 27, 2007. A preliminary design review meeting is scheduled to be held in January 2008 after which finalization of the preliminary design report will begin.

Another part of the Collection System Remedial Program identified in the Consent Decree Section XII is capital infiltration/inflow (I/I) reduction activities. Pursuant to item 35 in Section XII, the City/Parish is required to spend at least \$3 million annually for sewer repairs, sewer rehabilitation, and other capital expenditures related to reducing I/I in the North, South, and Central Plant Collection Systems. The City/Parish spent approximately \$3.7 million during 2007 and therefore, the City/Parish was in compliance with Section XII Collection System Remedial Program during this reporting period. All goals were exceeded. There were no problems encountered in the Collection System Remedial Program during this reporting period and non-compliance is not anticipated during the next reporting period. Exhibit 3 identifies the funds expended during 2007 to meet this requirement.

#### EXHIBIT 3

I/I Reduction Activities Summary

PROJECT DESCRIPTION		DESCRIPTION 2007 % ACTU COMPLETE COMP		CONSTRUCTION COST/BID	EXPENDITURES 2007
05-CDR- RBL2	Annual Lining Project (Yr. 2)	100%	100%	\$1,800,000.00	\$1,799,391.00
05-CDR- 07	PS #45 Rehab	Under Design	Under Design	N/A	N/A

#### EXHIBIT 3

I/I Reduction Activities Summary

PROJECT	DESCRIPTION	2007 % COMPLETE	ACTUAL % COMPLETE	CONSTRUCTION COST/BID	EXPENDITURES 2007
05-CDR-	Physical Inspection	100%	100%	\$1,000,000.00	Estimated Dec. Bill
PI	for Evaluation of				not in. \$999,565.00
	Portions of the				
	Existing Sanitary				
	Sewers				
06-WC-	Annual Parishwide	100%	100%	\$1,000,000.00	\$990,908.00
AN-0053	Sewer Collection				
	System Rehabilitation				
	By Point Repair				
	TOT	AL EXPENDIT	URES IN 2007	\$3,800,000.00	\$3,789,864.00

### II Treatment Facility Assessment

Pursuant to Consent Decree Section XIII Remedial Measure Treatment Facility Assessment, no later than March 30, 2002 the City/Parish was to submit a Treatment Facility Assessment report which assesses the treatment capabilities of the North, South, and Central Wastewater Treatment Plants (WWTPs). The City/Parish submitted Treatment Facility Assessment Report on March 26, 2002. It was determined in the Treatment Facility Assessment Report, that all process units and conveyance elements had capacity for current and projected design flows at all three WWTPs. In addition, all WWTPs were found to have the ability to meet their permit effluent limits. Based on these findings, no WWTP facility improvements or expansion were required. The Treatment Facility Assessment Report also indicated that the monthly Operators Process Control meetings currently led by Dr. John J. Sansalone of LSU are having a beneficial impact on plant performance. However, it was determined later that additional improvements were needed at the South Wastewater plant which are now included in the IAP and RMAP2.

The City/Parish submitted Municipal Water Pollution Prevention (MWPP) Environmental Audit Reports for the North, South, and Central Wastewater Treatment Plants on May 24, 2007, August 28, 2007 and September 26, 2007, respectively (see Attachment C). These reports contain an evaluation and rating for influent loadings, plant performance, overflows & bypasses, treatment plant age, sludge disposal, new development in collection system, and operator certification training for the North, South and Central Wastewater Treatment Plants. The MWPP audit rated the treatment plants on the above factors for the year following the entry into the Consent Decree. The actions that will be taken to maintain compliance and prevent effluent violations are presented in MWPP Resolutions, which were submitted along with the audit. Some of those actions include managing a project to reduce the high concentration of hydrogen sulfide at the North and South treatment plants.

In addition, there has been other work at the WWTPs that has taken place during the past year to help improve the operation and maintenance of the plants. The status of construction projects at the WWTPs is provided below:

•North WWTP digester cleaning project is 30% complete.

- •South WWTP replacement of the digester covers on digesters No. 3 and No. 4 is approximately 75% complete.
- •South WWTP electric actuators in the chlorine chamber sluice gate valves project is 99% complete.
- •North and South WWTPs grit dewatering screw conveyors project is 100% complete.
- •Central WWTP primary clarifier expansion joint sealing project is 100% complete.

## III Environmental Results Monitoring (ERM)

Pursuant to Consent Decree Section XIV Remedial Measures – Environmental Results Monitoring Plan, the City/Parish shall implement the Environmental Results Monitoring Plan attached in Consent Decree Exhibit G. The objective of the ERM program is to measure the environmental benefits from the Work performed under the Consent Decree through measurement of water quality improvements. The impact of the Program work throughout the City/Parish is tested by monitoring sewage indicating pollutants in major receiving waters prior to and following completion of remedial measures within each drainage basin. The plan outlines four sampling locations, including all major tributaries in East Baton Rouge Parish, which enter the Amite River System – and eventually Lake Ponchatrain.

The Phase I Baseline Monitoring was completed during the 2004 reporting period. The Phase II Results Monitoring will began 6 months following completion of all remedial measures within a specified drainage area contributing to an identified sampling location.

## **IV** Interim Relief Measures Activities

Paragraph 39 of the Consent Decree provides interim effluent limits of 75% removal of BOD and TSS (based on 30-day average removal rates), until completion of all RMAP construction projects, as an interim relief to the 85% removal requirement of the three wastewater treatment plant (WWTP) National Pollution Discharge Elimination System (NPDES) permits.

During 2007 the North WWTP has been in compliance with the 75% interim effluent limits for removal of both TSS and BOD the entire twelve month period. In fact, the North WWTP met the permit limit of 85% removal for TSS the entire twelve month period, and it also met the permit limit for 85% removal for BOD 10 months, as illustrated by Exhibit 4.

The Central WWTP has been in compliance with the 75% interim effluent limits for removal of TSS for all twelve months, and for eleven months for the removal BOD. The Central WWTP also has met the permit limit of 85% removal of TSS for eleven months and four months for BOD. The South WWTP has been in compliance with the 75% interim effluent limit for TSS all year. However, it did not meet the 75% interim effluent limit for BOD for six months of the year.

The South WWTP has experienced operational difficulties during the past year related to various issues such as the following: primary basins #2, #4, #5 & #6 out of service; final clarifier #3 pump failure; final clarifier #4, #6, and #8 due to pump failure and preventative maintenance work; chlorine induction unit failure; bar screen E103 being out of service; and belt press filtrate (high BOD content) from digester #3 and #4 cleaning project was being dumped into plant influent. Many of these issues have been resolved throughout the year, and others are still

outstanding. More details can be found in the Quarterly EPA Reports from 2007. The South Plant's performance improved significantly in the last half of 2007.

	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
North Plant-												
LA0036439												
BOD	79	77	80	81	84	81	85	87	86	86	86	85
TSS	91	92	90	90	93	91	94	95	91	93	89	91
<b>Central Plant-</b>												
LA0036421												
BOD	67	76	81	86	83	86	84	86	84	83	87	80
TSS	84	88	90	91	90	90	88	90	88	86	90	86
South Plant-												
LA0036412												
BOD	63	63	64	70	70	75	74	80	81	80	79	78
TSS	83	80	82	83	85	86	90	89	88	90	87	85

#### **EXHIBIT 4** Monthly Average Percent Removal

## V Outreach and Public Awareness Program

The Consent Decree Section XV Outreach and Public Awareness Plan states that the City/Parish shall implement and follow the Outreach and Public Awareness Program Plan attached in Exhibit H of the Consent Decree. During the past year, the original Outreach and Public Awareness Program Plan was updated in December 2007. Once it is approved by the City/Parish it will be submitted to the EPA and LDEQ for review and approval.

During this reporting period, the City/Parish has continued its Outreach and Public Awareness Program in the same format and methods as used in past reporting periods. In addition, during the past year new tools such as the public information website are now available that provide the public with up to date information and news about the SSO Control and Wastewater Facilities Program, etc. Fact sheets have also been developed that can be accessed via the website, and will be eventually handed out during public meetings, that describe pertinent information and aspects about the Program.

During this reporting period City/Parish continued its Sewer Tie-in Program, which enables the homeowner to abandon their old septic tank at a fixed price. The City/Parish, through negotiations with several plumbing contractors, developed an agreement between the homeowners and contractors to wave all City/Parish permit fees in order to keep the septic tank abandonment fees to a minimum. In order to assist low income homeowners, the City/Parish, with funding from of a Community Development Block Grant (CDBG), pays for the septic tank abandonment fees after the homeowner has met the program guidelines. The information presented in this section demonstrates that the City/Parish has been in compliance with Section

## Baton Rouge Consent Decree

XV Outreach and Public Awareness Program during the reporting period. Exhibit 5 summarizes annual outreach activities.

#### EXHIBIT 5

Summary of Public Outreach Activities

	Activity	Date / Status
1.	Provide Program informational brochures on SSO Plan	July 2001
2.	Neighborhood meetings in various Metropolitan Council Districts	On going
3.	Meet with Mayor and the Metropolitan Council members on program status	On going
4.	Develop information program on the Consent Decree and the Sewer Improvement Program	On going
5.	Post Consent Decree and overflow information on City-Parish website	June 2002
6.	Public appearances by DPW Director	On going
7.	Provide SCIP and SSO CAP information in the Mayor-President's Budget	Nov 2004
	Message	
8.	Sewer Tie-In Program	On going
10.	Consent Decree copies made available	On going
11.	SRF Loan Program	On going

### VI Plan Modification Needs

The City/Parish has not identified any deficiencies in the Cross Connection Elimination Plan, the Preventive Maintenance Program, or the Sanitary Sewer Overflow Response Plan.

However, Remedial Measures Action Plan (RMAP) has been revised and submitted for approval by the City/Parish. The Remedial Measures Action Plan was modified to provide for revisions to the Updated Second RMAP (RMAP2). Due to changes in Program Manager, and budgetary constraints encountered in the selection of option 7, the City/Parish, with the help of CH2M HILL, has revised the RMAP2 to implement a much more aggressive and comprehensive sewer rehabilitation program to reduce inflow and infiltration. Once the Updated RMAP2 Report is approved by the City/Parish it will be submitted to the EPA and LDEQ for final review and approval.

### VII Stipulated Penalties

Exhibit 6 presents a summary of submittal and construction milestone dates subject to stipulated penalties in accordance with Section XXI of the Consent Decree. As of December 31, 2007 no submittal milestone deadlines have been missed. In addition, design and construction milestone deadlines are currently pending City/Parish, then EPA and LDEQ approval once the Updated Second RMAP is submitted, and therefore are not subject to stipulated penalties.

Non-compliance items, which are subject to stipulated penalties in accordance with Section XXI of the Consent Decree, are identified in each Consent Decree Quarterly EPA Report. A summary of non-compliance items and associated stipulated penalties reported in quarterly reports for the year 2007 are presented in Exhibit 7.

### EXHIBIT 6

Summary of Stipulated Penalties for Submittal/Design and Construction Milestones

Stipulated Penalties		Deadline	Completion	Total Owed*	Total Paid*
Past Stipulated Penalties		15-Apr-02	12-Apr-02	\$216,000	\$216,000
Failure to Submit Timely Reports					
Quarterly Reports	16 <sup>h</sup> Report	30-Apr-06	24-Apr-06		
	17 <sup>th</sup> Report	30-Jun-06	28-Jul-06		
	18 <sup>th</sup> Report	30-Sept-06	25-Oct-06		
	19 <sup>th</sup> Report	31-Dec-06	26-Jan-07		
Annual Reports	2007 Report	31-Jan-08	31-Jan-08		
Collection System PMP Plan	L	30-Mar-01	29-Mar-01		
Treatment Facility Assessment Report		30-Mar-02	26-Mar-02		
SEP Completion Report		15-Sep-04	10-Sep-04		
Failure to Submit Timely and Complete 2 <sup>nd</sup> R	MAP	1-Dec-02	20-Nov-02		
Failure to Meet RMAP and Construction Mil	estones				
Start of Construction		15-Jan-01	10-Jan-01		
1st RMAP Construction Complete		4-May-07	Schedule pending		
I I I I I I I I I I I I I I I I I I I		j	approval		
1st & 2nd RMAP at 33%		1-July -07	11		
		-	approval		
1st & 2nd RMAP at 66%		1-July -11	Schedule pending		
			approval		
2nd RMAP Design Completion		3-June-13			
			approval		
Completion of all Construction		1-Jan-15	Schedule pending		
			approval		
Failure to Meet SEP Milestone Dates					
Donwood/Oak Manor Project	(start construction)	14-Mar-03	21-Feb-03		
	(end construction)	14-Mar-04	04-Sept-03		
Pleasant Hills/Green Acres Project	(start construction)	14-Jun-03	27-Jun-03		
	(end construction)	14-Jun-04	30-Jul-04		
Sharon Hills/Cedar Glen/Pleasant Hills Project	(start construction)	14-Mar-03	27-Jun-03		
	(end construction)	14-Aug-04	30-Jul-04		
Stumberg Lane Project	(start construction)	14-Mar-03	28-Mar-03		
	(end construction)	14-Mar-04	15-Sept-03		
			Total	\$216,000	\$216,000

### EXHIBIT 7

Summary of Stipulated Penalties for Non-Compliance Items

Stipulated Penalties	# of Occurrences	Per Occurrence	Total
Failure to Seal/Eliminate New Cross Connections			
Unauthorized Discharges			
Less Than 1 million gallons and Non-Compliance		\$5,000	
Less Than 1 million gallons and Non-Compliance (Post-remedial work)	N/A	\$5,000	
Less Than 1 million gallons and Compliance (Post-remedial work)	N/A	\$1,000	
1 million gallons or more (Pre- or post remedial work)	1	\$5,000	\$5,000
Non-compliant Discharges Daily Maximum Limits			
Weekly Average Limits	10	\$1,000	\$10,000
Monthly (30-day Average) Limits	25	\$2,500	\$62,500
		Total	\$83,000

Attachment A RMAP1 Status Report

#### Department of Public Works



City of Baton Rouge Parish of East Baton Rouge

Post Office Box 1471 Baton Rouge, Louistana 70821

November 7, 2007

#### CERTIFIED - RETURN RECEIPT REQUESTED

Chief,

Water Enforcement Branch (6EN-W) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region VI 1445 Ross Avenue Dallas, Texas 75202-2733

Re: City of Baton Rouge and Parish of East Baton Rouge Consent Decree-Civil Action No. 01-978-B-M3 Section XVIII - Reporting of the Consent Decree RMAP1 Status Report - Period Ending October 31, 2007

Gentlemen:

Pursuant to Paragraph 53 of the Consent Decree, the City of Baton Rouge and Parish of East Baton Rouge (City/Parish) hereby submits the First Remedial Measures Action Plan (RMAP1) Status Report describing the progress of RMAP1 projects listed in Exhibit F of the Consent Decree as of October 31, 2007. In addition this report includes a formal "Request for Time Extension" for those RMAP1 projects currently in progress but not yet completed. A schedule for project completion for these RMAP1 projects is also incorporated in the report. This report contains a summary of compliance with and activities related to:

- Collection System Remedial Program
- Reporting
- Forms of Notice

These activities are described in Sections XII, XVIII, and XXXIII of the Consent Decree.

Pursuant to Paragraph 49 and 117 of the Consent Decree, the City of Baton Rouge and Parish of East Baton Rouge hereby submits for review and approval three copies of the RMAP1 Status Report to the US EPA and LDEQ and one copy to the US DOJ and City/Parish DPW.

I certify that the information contained in or accompanying this EPA RMAP1 Status Report is true, accurate and complete. As to those identified portions of this document for which I cannot personally verify their truth and accuracy, I certify as the official EPA RMAP1 Status Report, Mr. Peter T. Newkirk November 7, 2007 Page 2

having supervisory responsibility for the persons who, acting under my direct instructions, made the verification, that this is true, accurate and complete.

Sincerely,

Peter T. Newkirk Director of Public Works

Cc: Honorable Melvin L. "Kip" Holden, Mayor-President Mr. Walter Monsour, Chief Administrative Officer Chief, Environmental Enforcement Section, US DOJ Mr. Bruce Hammett, LDEQ Ms. Peggy Hatch, LDEQ Mr. Harold Leggett, LDEQ Ms. Mona Tates, US EPA Region 6 Mr. Carlos Zequeira, (6RC-EA) Ms. Gladys Gooden-Jackson, (6EN-WC) Mr. Wade Shows Mr. Mark LeBlanc Mr. Bryan Harmon Mr. Richard Wright Mr. Walter Jenkins Mr. David Ratcliff Ms. Cheryl Berry Mr. Jim Hawley, CH2MHILL

# City of Baton Rouge and Parish of East Baton Rouge Consent Decree-Civil Action No. 01-978-B-M3

## EPA RMAP1 Status Report - Data Review

TO:	Bryan Harmon/DPW
	Rick Wright/DPW
	E.J. Amato/DPW
FROM:	Karen Johnson/CH2M HILL
DATE:	December 3, 2007

Gentlemen:

Draft copies of the above referenced report have been submitted for your review. This review is to insure that the data submitted under your direction, has been stated in a truthful and accurate manner in the EPA RMAP1 Status Report. Once the review of your portion of data is complete and corrected, please sign below the paragraph stating that fact and return for processing.

Karen Johnson, PE Regulatory Coordinator/CH2M HILL

I certify that the information contained in or accompanying the portion of the EPA RMAP1 Status Report that I am responsible for is true, accurate, and complete. As to those identified portions of this document for which I cannot personally verify their truth and accuracy, I certify as the official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification, that this is true, accurate and complete.

CC:

Document Control

KNX/12-5-07-SIGNATURES.DOC

## City of Baton Rouge and Parish of East Baton Rouge Consent Decree-Civil Action No. 01-978-B-M3

## **EPA RMAP1 Status Report - Data Review**

TO:	Bryan Harmon/DPW
	Rick Wright/DPW
	E.J. Amato/DPW
FROM:	Karen Johnson/CH2M HILL
DATE:	December 3, 2007

Gentlemen:

Draft copies of the above referenced report have been submitted for your review. This review is to insure that the data submitted under your direction, has been stated in a truthful and accurate manner in the EPA RMAP1 Status Report. Once the review of your portion of data is complete and corrected, please sign below the paragraph stating that fact and return for processing.

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CC:

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## EPA RMAP1 Project Status Report

PREPARED FOR:	Bryan Harmon/DPW
PREPARED BY:	Karen Johnson/CH2M HILL
COPIES:	Rick Wright/DPW Amy Schulze/DPW Cheryl Berry/DPW Bob Abbott/DPW Mark LeBlanc/DPW Jim Hawley/CH2M HILL Lee Davis/CH2M HILL Gordon Garner/CH2M HILL
DATE:	November 12, 2007

## Background Summary

On March 14, 2002, the City of Baton Rouge, Louisiana and the Parish of East Baton Rouge, Louisiana (collectively "the City/Parish") entered into a Consent Decree with the United States and the State of Louisiana. This Consent Decree takes precedence over the original Consent Decree entered into in 1989 which requires the City/Parish to address its wastewater collection system in addition to its wastewater treatment plants (WWTPs). The 2002 Consent Decree outlined different remedial measures the City/Parish was to follow in order to meet compliance objectives and requirements. Specifically, there were remedial measures listed for the sewer collection system that were to help minimize and prevent unauthorized discharges from the collection systems for the North, South, and Central Plants. At the time the Consent Decree was written the City/Parish didn't decide on the plan it was going to implement in order to address these unauthorized discharges. Therefore, several alternatives were presented in the Consent Decree to help the City/Parish evaluate different options available and to choose the alternative that it was going to execute. However, there were several projects common to all of the alternatives presented in the Consent Decree that the City/Parish was beginning to implement while it was determining which alternative to select. These projects were called the First Remedial Measures Action Plan (RMAP1) projects, and were listed in Exhibit F of the Consent Decree.

This technical memorandum (TM) summarizes the status of the RMAP1 projects listed in Exhibit F of the Consent Decree. In addition, this TM includes a formal "Request for Time Extension" for the City/Parish from the EPA and LDEQ, for those RMAP1 projects currently in progress but not yet completed. These delays are due to the ramifications of Hurricane Katrina and changes in engineering priorities that have evolved from the new technical approach. A schedule for project completion for these RMAP1 projects is also incorporated in the TM. This TM will serve as the milestone requirement pursuant to Section XVIII - Reporting, of the Consent Decree.

## **RMAP1** Project Status

The RMAP1 projects listed in Exhibit F of the Consent Decree were those projects common to the alternatives presented in Section XII - Remedial Measures: Collection System Remedial Program of the Consent Decree. There are a total of nineteen of these "common" projects that were identified through various modeling and Value Engineering efforts associated with the original Sanitary Sewer Overflow (SSO) Corrective Action Plan developed by Montgomery Watson sometime in 1998. These projects were common to the alternative plans presented in the Consent Decree that were focused on utilizing deep tunnels/storage in order to control the SSO's throughout the City/Parish's wastewater collection system. The phased implementation of these RMAP1 projects initially began sometime at the end of 1999 and the beginning of 2000. These projects were planned to start and finish at different times due to funding constraints, etc.

Since the date of entry into the Consent Decree, the City/Parish has been diligently working on the design and construction of these RMAP1 projects. However, during the planned execution of these projects significant events have taken place with the change in technical approach of the Collection System Remedial Program, and with the associated delays that came about dealing with the aftermath of the Hurricane Katrina disaster to the Louisiana Gulf Coast, which directly affected the City/Parish.

In the years 2004 and 2005, the City/Parish decided to re-evaluate the planned technical approach of their Collection System Remedial Program, while in the process of executing the RMAP1 projects. Their review resulted in a momentous change in technical approach from deep tunnels and storage, to sewer rehabilitation. Therefore, the original RMAP1 projects were all re-examined, and some wound up not fitting into the "new" plan, these projects were then shelved.

Also as previously mentioned, Hurricane Katrina devastated the Louisiana Gulf Cost in 2005 in a variety of ways. The Louisiana Gulf Cost area was uninhabitable for many weeks/months after the considerable damage caused by Hurricane Katrina. Due to the high winds, large amount of rainfall (up to 15 inches in some locations) and the storm surge, destruction was catastrophic. Katrina was the costliest, most destructive, and one of the five deadliest hurricanes in the history of the United States. Federal disaster declarations covered approximately 90,000 square miles of the Southern United States. As a direct result, the City/Parish suffered from the aftermath of Hurricane Katrina from primarily a demographic and an economic perspective. The City/Parish had an influx in population in the months following hurricane. The City/Parish was a major evacuation site that drew thousands of evacuees. People were living in tents in the park near the Baton Rouge City Hall. For months the City/Parish staff were diverted to emergency services, assisting with relocation facilities and coping with the influx of people, many of whom are now permanent residents. The City/Parish's internal working systems were severely overloaded and there were months of delays in re-establishing normal City/Parish business operations. In addition after the hurricane, much of the local City/Parish engineering and construction labor workforce left the area to work in areas of the Gulf Coast (such as New Orleans) more severely impacted by the storm which resulted in a labor shortage in the City/Parish in the months following the hurricane. Hurricane Katrina caused huge delays in the normal operations of the Baton Rouge City government, with an increase in population, the City's

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internal systems were severely over loaded and experienced months of delays in reestablishing normal operations. Many RMAP1 projects in progress in 2005 during this time period were delayed due to dealing with the aftermath of Hurricane Katrina. The status of all of these RMAP1 projects is discussed in more detail in the following sections.

#### **RMAP1** Projects Completed

As previously noted, Hurricane Katrina devastated the Louisiana Gulf Coast in 2005, and there has been a major change in the technical approach to address the requirements in Section XII - Collection System Remedial Program of the Consent Decree. Regardless of these catastrophic events and the significant changes in technical approach of this program, most RMAP1 projects have been completed. Exhibit 1 depicts the list of completed RMAP1 projects.

Consent Decree RMAP1 Projects	Corresponding City/Parish RMAP1 Projects	Construction Completion Date
N-05 PS 24 Area Upgrades	*PS 24/43 Area Upgrade (01-RMP-N05)	April 2006
N-06 PS 43 Area Upgrades	PS 2445 Alea Opgrade (DI-RMP-NDS)	Apra 2000
N-09 PS 44/46 Area Upgrades	PS 44/46 Area Upgrades (01-RMP-N09)	August 2004
N-10 PS 240 Area Upgrades	PS 240 Area Upgrades (01-RMP-N10)	October 2005
	NTSN SS Eval. Study (99-RMP-N-99)	May 2003
	**Bellingrath Rehab. (03-RMP-N14) (NSRP)	December 2004
N-99 North Further Investigations	**Frenchtown Road Sewer Rehab. (03-RMP-N15)	July2005
	**North Area Comprehensive Rehab. (03-RMP- N23)	April 2006
	**PS 45 Area Rehab. (00-RMP-N31)	January 2001
C-03 PS 2 Area Rehabilitation	PS 2 Area Upgrades (01-RMP-C03)	September 2002
S-01B SWWTP Influent PS	SSO SWWTP Infl. PS Upgrade (99-RMP-SO1B)	April 2003
S-11 PS 40 Area Rehabilitation	S-11 PS 40 Area Rehabilitation	August 2006
	SSO Engr-South (99-RMP-S99)	May 2003
***S-99 South Further	PS 944 Area Upgrade Grv Sewer (99-RMP-S99)	May 2003
Investigations	PS 944 Area Upgrade (99-RMP-S99)	May 2003
	PS 177 Area Upgrade (99-RMP-S99)	May 2003
	**PS 211 Area Upgrades (99-RMP-S11)	December 2003

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EXHIBIT 1 Completed RMAP1 Projects		
Consent Decree RMAP1 Projects	Corresponding City/Parish RMAP1 Projects	Construction Completion Date
"Notes: These projects were added	as RMAP1 projects by the City/Parish after entry into	the Consent Decree
	lit up into multiple projects for better execution	the consent prove

As shown in Exhibit 1, the manner in which several of the projects were executed may have changed since the time that the Consent Decree was written. For example, some of the project names have been altered and some projects were split up into several smaller projects for execution purposes, etc. In addition, since the implementation of RMAP1 projects began, the City/Parish has actually developed some additional projects that were executed as if they were original RMAP1 projects, as shown in Exhibit 1. Many of these projects were added after wastewater collection system studies were completed in various areas of the City/Parish and high priority opportunities were identified. Since these projects were consistent with the Collection System Remedial Program referenced in the Consent Decree, they were then carried out as RMAP1 projects, though this was not required in any way as a part of the Consent Decree.

#### **RMAP1** Projects Deferred

There are several other RMAP1 projects that have not been completed as planned. Of these projects not completed, some are currently under design or in construction (see the section below for more details about these "on-going" projects), others were deferred and are in the process of being reevaluated as a part of the "new" RMAP2 plan, and still others were deferred indefinitely due primarily to the change in technical plan approach from deep tunnels and storage to sewer rehabilitation. Exhibit 2 – RMAP1 Deferred Projects, lists the deferred RMAP1 projects, and a brief summary of the reason for deferment.

Deferred RMAP1 Projects		
Consent Decree RMAP1 Projects	Corresponding City/Parish RMAP1 Projects	Reasoning
*N-01 Choctaw Basin Return System	Choctaw Area Storage (04- RMP-N22)	Project suspended due to change in plan from deep tunnels/storage to rehabilitation. Project is currently being reevaluated as a part of the CH2M HILL RMAP2 plan under development.
*N-13 North Choctaw Basin System	S-05 PS 58B Area Upgrades MWH RMAP2	Project suspended due to change in plan from deep tunnels/storage to rehabilitation. Project is currently being reevaluated as a part of the GH2M HILL RMAP2 plan under development.
N-04 PS 47 Area Upgrades	N-04 PS 47 Area Upgrades	Shelved due to change in plan from deep tunnels/storage to rehabilitation.

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Consent Decree RMAP1 Projects	Corresponding City/Parish RMAP1 Projects	Reasoning
*N-07 PS 39/55 Area Upgrades	N-07 PS 39/55 Area Upgrades	Project stopped during design phase due to change in plan from deep tunnels/storage to rehabilitation.
N-11 PS 65 Area Upgrades	PS 65 and 65A Area Upgrades (01-RMP-N11)	Project suspended at preliminary design phase due to change in plan from deep tunnels/storage to rehabilitation, significant population growth in the area, and the Comite River diversion cutting the system off.

A more detailed description of the reasoning behind some of the indefinite deferments of the RMAP1 projects listed in Exhibit 2, are as follows:

- Both of the Choctaw Basin projects were initially shelved due to the change in program plan from deep tunnels and storage to rehabilitation. The City/Parish actually purchased land for the new storage facilities and it was in the process of contract negotiations with several engineering firms for the design portion of the project work, when the projects were stopped. These projects have recently been reevaluated to see if they fit into CH2M HILL's RMAP2 program plan.
- The PS 47 Area Upgrades project never got off the ground before the change in plan from deep tunnels and storage to rehabilitation.
- The PS 35/55 Area Upgrades project was 60% designed before it was stopped due to the change in plan from deep tunnels and storage to rehabilitation. CH2M HILL is currently reevaluating this project to see if it should be completed or modified as a part of their new program plan that is currently under development.
- The PS 65 Area Upgrades project was approximately 30% designed before being suspended due to the change in plan from deep tunnels and storage to sewer rehabilitation. The project scope is currently being studied by a consulting engineering firm hired by the City/Parish. The collection system in the area is being reevaluated to determine the best overall solution before moving forward with projects in this area of the City/Parish. The first issue being evaluated is the possible relocation of PS 65 (which was listed to be abandoned in the project's original scope). The area that PS 65 serves will be isolated from the pump station by the Comite River Diversion structure (this is a COE flood control project). The effects of the installation of this diversion structure may require relocating the pump station. Also, this part of the City/Parish is experiencing tremendous growth which needs to be taken into consideration when planning projects in the area.

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## **On-going RMAP1 Projects - Request for Time Extension**

The City/Parish requests a time extension for those RMAP1 projects that are currently in progress. There are a total of five RMAP1 projects that are on-going at this time. These projects were all put on hold and eventually reevaluated due to the change in technical plan from deep tunnels and storage to sewer rehabilitation. In addition, the effects of Hurricane Katrina on the City/Parish and the surrounding area, contributed to the delay in these RMAP1 projects. These projects and their projected construction completion dates are listed in Exhibit 3. Note that these dates are projected construction completion dates only and do not include a contingency, or buffer for possible weather delays or any other unforeseen events that may impact design and construction of the projects. We have included a buffer to take these unpredictable events into account. We have assumed a standard buffer of six (6) months for consistency purposes for all on-going RMAP1 projects, which can be seen in Exhibit 3. We suggest that these "buffered" dates become the new compliance deadlines for the on-going RMAP1 projects.

Consent Decree RMAP1 Projects	City/Parish DPW RMAP1 Projects	Projected Construction Complete Dates	Buffered Construction Completion Dates
N-02 PS 49/52 Area Upgrades	PS 49/52 Area Upgrade (01- RMP-N02)	###	***
N-12 North Sewer Rehab Projects	North Sewer Rehab Projects (03-RMP-N12)	December 2007	June 2008
S-08 Industriplex Area Upgrades	Industriplex Area Upgrade FM (99-RMP-S08)	May 2009	November 2009
	Industriplex Area Upgrade PS 355 (99-RMP-S08)		
S-14 Kleinpeter Area Upgrades	Kleinpeter Area Upgrades (03- RMP-S14)	October 2009	April 2010
S-16 PS 136 Area Upgrades	PS 136 Area Upgrades (99- RMP-S16)	October 2009	April 2010
	PS 136 Area PS Upgrades (99-RMP-S16)		

Some addition discussion about the status of these "on-going" RMAP1 projects is provided below:

 The PS 49/52 Area Upgrades project has already been designed. In addition, construction work is approximately 80% finished. The City/Parish is in a legal dispute with the Construction Contractor about completion of work. They are trying to negotiate with the Contractor in the hopes of resolving the issues as soon as

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possible. As soon as these issues are negotiated, the City/Parish will be able to provide a projected construction completion date for this project.

- The North Sewer Rehab projects have been designed and are currently at approximately 75% complete with construction.
- The Industriplex Area Upgrades projects are approximately 95% completed with design. Design specifications and drawings are in the process of being modified to incorporate CH2M HILL and City/Parish comments.
- The Kleinpeter Area Upgrades project is at about 80% of the design completed. CH2M HILL is in the process of re-evaluating the flows, which once done will be provided to the design engineering firm for design finalization.
- Approximately 75% of the design has been completed for the PS 136 Upgrades project. The City/Parish is in the process of the review/approval of the design modifications. The design engineering firm is awaiting a contract extension to incorporate the design changes and complete the design.

These "on-going" RMAP1 projects will continue to be reported periodically in both the Quarterly and Annual EPA Reports. We request a formal letter of approval from EPA/LDEQ for the proposed RMAP1 project extensions.

Attachment B IAP Projects Summary Report

#### Office of the Parish Attorney



City of Baton Rouge Parish of East Baton Rouge

222 St. Louis Street Post Office Box 1471 Baton Rouge, Louisiana 70821

225/389-3114 225/389-5554 (Fax)

October 17, 2007

Mr. Michael T. Donnellan U. S. Dept. of Justice P.O. Box 7611 Washington, DC 20044-7611

Ms. Mona Tates 6EN-WM U.S. EPA - REGION 6 1445 Ross Avenue, Suite 1200 Dallas, TX 75202-2733

Mr. Ted R. Broyles, II La. Dept. of Environmental Quality 602 N. Fifth Street Baton Rouge, LA 70802

Re: Submittal of East Baton Rouge Parish Memo: "South Wastewater Treatment Plant Summary of Immediate Action Plan Projects"

Dear Sirs and Madame:

Enclosed please find a hard copy of the memo prepared at your request following our telephone conference of October 12, 2007. The memo details the five projects that our consultants believe will bring us into daily compliance with effluent limits for the South Wastewater Treatment Plant during dry conditions or moderate rain conditions. As you can see, the last projects are scheduled to be completed by the end of August, 2009. We should then be in a position to judge plant performance over the next three to four months. It is my understanding that this information will be used to determine if adjustments need to be made in interim limits and the schedule should be included in the modified consent decree.

We are preparing a list of the 1<sup>st</sup> RMAP projects that have not been completed by the deadline due to the hurricanes and the change from the deep tunnel program. We will submit a modified schedule for the completion of these projects. It is my understanding that modifications to the schedule do not need court approval and can be done by consent of the parties.

E. WADE SHOWS Parish Attorney If there are any questions or concerns please contact us as soon as possible. If there is any additional information you need at this time, please contact me as soon as possible.

Sincerely, Robert H. Abbott III

Special Asst. Parish Attorney

- DOJ 1 copy
- EPA 3 copies
- DEQ 2 copies
- cc: Pete Newkirk; Bryan Harmon; Mark LeBlanc; Rick Wright Walter Monsour

## South Wastewater Treatment Plant Summary of Immediate Action Plan Projects

## Background

The City of Baton Rouge/Parish of East Baton Rouge (C-P), Louisiana, Department of Public Works (DPW) owns and operates the South Wastewater Treatment Plant (SWWTP). The SWWTP is presently required to maintain a 30-mg TSS/L and 30-mg BOD/L monthly average and 45-mg TSS/L and 45-mg BOD/L weekly average discharge standard.

The SWWTP is configured in two process trains which are generally referred to as the "gravity train" and the "force main train." Each of these trains provides pretreatment (i.e. screening and grit removal), primary settling, secondary treatment consisting of trickling filters and final settling tanks, and effluent disinfection. Treated effluent is discharged to the Mississippi River.

The SWWTP is a 120 mgd peak flow secondary treatment plant. The plant is in need of modifications to improve operational and mechanical reliability in order to ensure consistent compliance with the plant's effluent discharge permit limits.

The following five projects were identified as Immediate Action Plan (IAP) projects meant to aid the South WWTP in meeting the aforementioned NPDES permit limits:

## **Project Information**

Project Name:	IAP #1 – South Wastewater Treatment Plant Screening Improvements	
Project Number:	06-WT-TP-0059	
Project Description:	The project consists of screening improvements to the gravity side of the SWWTP. The existing bar screens on the gravity side of the plant are frequently out of service due to mechanical failure. Out of service bar screens result in reduced preliminary treatment and allows rags and other large material to accumulate in downstream treatment facilities, such as primary settling tanks, leading to process mechanical equipment failure in the downstream processes.	
Design Schedule:	07/07 to 04/08	
Bid Schedule:	04/08 to 07/08	
Construction Sched	ule: 07/08 to 05/09	
Project Name:	IAP #2 – South Wastewater Treatment Plant Primary Treatment Improvements	
Project Number:	06-WT-TP-0060	

Project Description: The purpose of this project is to improve primary treatment at the SWWTP by utilizing chemically enhanced primary treatment to reduce loadings to the trickling filter process. Improvements will also include the repair and/or replacement of clarifier mechanisms and components, replacement of existing sludge pumps, and the replacement of inlet plug valves on clarifiers 1, 2, 3, and 4. The project will provide for flow control/flow measurement improvements at multiple splitter boxes on the gravity side of the plant by installing weir gate electric actuators and level elements for flow measurement. The project will connect the actuators and level elements to the plant SCADA system to allow monitoring and control of the flow splits to provide remote control capabilities.

Design Schedule:	07/07 to 06/08
Bid Schedule:	06/08 to 09/08
Construction Schedule:	09/08 to 07/09

#### Project Name: IAP #3 – South Wastewater Treatment Plant Trickling Filter Improvements

Project Number: 06-WT-TP-0061

Project Description: The project includes construction of a new recirculation pump station to maintain proper wetting rates on the trickling filters. The new recirculation pumping station will require a flow rate between 20 to 100 million gallons per day (mgd). In addition to the new recirculation pump station, hydraulic and process improvements require that the two final settling tank complexes be interconnected with piping. The interconnection of the settling tank complexes allows for reception of trickling filter effluent from both the gravity and the force main sides of the plant

Design Schedule:	07/07 to 06/08
Bid Schedule:	06/08 to 09/08
Construction Schedule:	09/08 to 08/09

Project Name:	IAP #4 – South Wastewater Treatment Plant Effluent Pump Station Stabilization and Repairs
Project Number:	06-WT-TP-0062
Project Description:	The project includes the investigation, engineering, and construction services for pump station improvements at the SWWTP. Ground settlement has caused wiring, piping and pump operational problems

in the effluent pump station. Improvements are intended to improve operational reliability of the pump station.

Design Schedule:	10/07 to 06/08
Bid Schedule:	06/08 to 09/08
Construction Schedule:	09/08 to 03/09

#### Project Name: IAP #5 – South Wastewater Treatment Plant Sludge Handling Improvements

Project Number: 06-WT-TP-0063

Project Description: The project involves engineering, testing, and construction services for sludge handling improvements at the SWWTP. The recommended improvements for the sludge handling process include: replace gravity thickener mechanisms, rehabilitate sludge pump station, improve site grading in gravity thickener complexes, improve thickener overflow capabilities, snail shell screening improvements, final settling tank sludge withdrawal improvements, and belt filter press filtrate line improvements.

Design Schedule:	10/07 to 05/08
Bid Schedule:	05/08 to 08/08
Construction Schedule:	08/08 to 08/09

Attachment C Municipal Water Pollution Prevention (MWPP) Environmental Audit Reports



#### **Department of Public Works**

City of Baton Rouge Parish of East Baton Rouge

Post Office Box 1471 Baton Rouge, Louisiana 70821

August 28, 2007

Department of Environmental Quality Office of Environmental Compliance Permits Compliance Unit Post Office Box 4312 Baton Rouge, Louisiana 70821-4312

Re: Municipal Water Pollution Prevention (MWPP) Environmental Audit Report

LPDES PERMIT NUMBER: LA0036412 AI# 4841

Dear Sirs:

As required by your office, we are submitting the annual Municipal Water Pollution Prevention Environmental Audit report along with the MWPP Resolution. This report represents our South Wastewater Treatment Plant from June 1, 2006 to May 31, 2007.

If you have any questions concerning this matter, please contact Mr. Charles M. O'Brien of my staff at (225) 389-3240.

Sincerely yours,

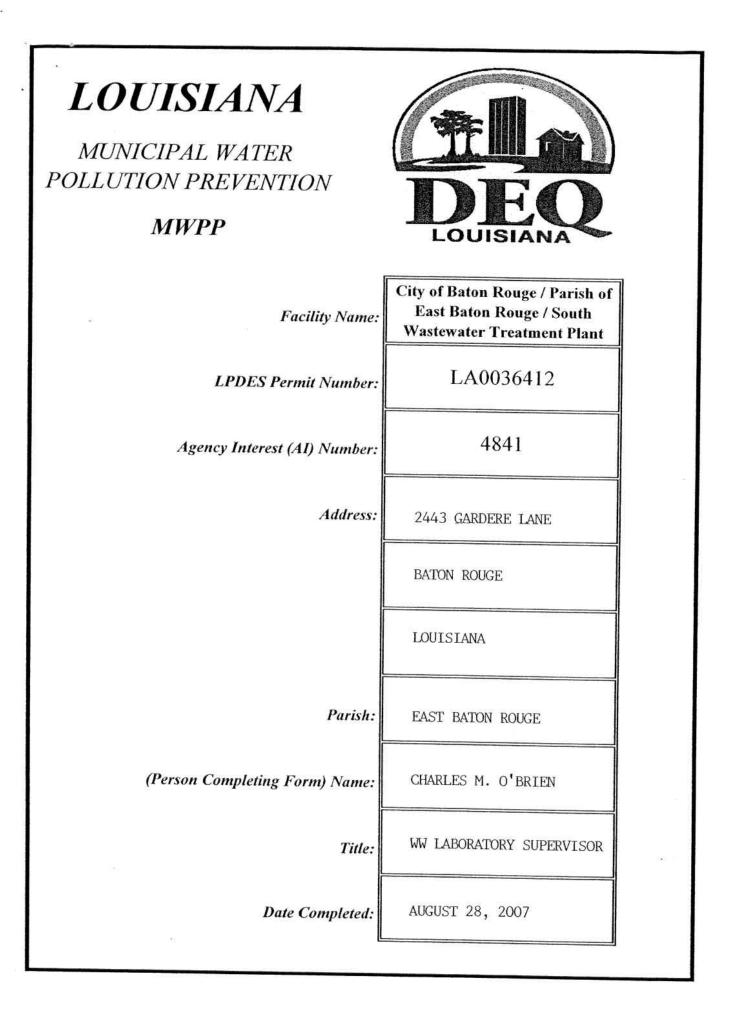
Peter T. Newkirk, PE

Public Works Director

PTN/CB/pas

Wade Shows, Parish Attorney
 Cheryl Berry, PE, Plant Engineer
 Walter Jenkins, Wastewater Treatment Plant Manager
 Garcia Dialekwa, Assistant Wastewater Treatment Plant Manager

Attachment(s):



# **INSTRUCTIONS**

- 1. Complete only the sections of the Environmental Audit which apply to your wastewater treatment system. Leave sections that do not apply blank and enter a "0" for the point value.
- 2. Parts 1 through 7 contain questions for which points may be generated. These points are intended to communicate to the department and the governing body or owner what actions will be necessary to prevent effluent violations. Place the point totals from parts 1 through 7 on the Point Calculation page.
- 3. Add up the point totals.
- 4. Submit the Environmental Audit to the governing body or owner for review and approval.
- 5. The governing body must pass a resolution which contains the following items:
  - a. The resolution or letter must acknowledge the governing body or owner has reviewed the Environmental Audit.
  - This resolution must indicate <u>specific</u> actions, if any, will be taken to maintain compliance and prevent effluent violations. Proposed actions should address the parts where maximum or close to maximum points were generated in the Environmental Audit.
  - c. The resolution should provide any other information the governing body deems appropriate.

## PART 1: INFLUENT FLOW/LOADINGS (all plants)

A. List the average monthly volumetric flows and BOD loadings received at your facility during the last reporting year.

Column 1

Average Monthly Flow (million gallons per day, MGD) Column 2 Average Monthly BOD5 Concentration (mg/l)

## Column 3

Average Monthly BOD5 Loading (pounds per day, lb/day)

G				
29.29	x	151	<b>x</b> 8.34 =	36,886
33.16	x	133	<b>x</b> 8.34 =	36,782
34.82	x	126	<b>x</b> 8.34 =	36,590
31.99	x	125	<b>x</b> 8.34 =	33,350
32.95	x	127	<b>x</b> 8.34 =	34,900
36.05	x	142	<b>x</b> 8.34 =	42,693
42.76	x	139	<b>x</b> 8.34 =	49,570
49.29	x	109	<b>x</b> 8.34 =	44,808
36.85	x	146	<b>x</b> 8.34 =	44,870
37.55	x	144	<b>x</b> 8.34 =	45,096
36.81	x	160	<b>x</b> 8.34 =	49,119
39.62	x	152	<b>x</b> 8.34 =	50,225

BOD loading = Average Monthly Flow (in MGD) x Average Monthly BOD concentration (in mg/l) x 8.34

**B.** List the design flow and design BOD loading for your facility in the blanks below. If you are not aware of these design quantities, refer to your Operation and Maintenance (O&M) Manual or contact your consulting engineer.

Design Flow, MGD:	54	<b>x</b> 0.90 =	48.60
Design BOD, lb/day:	93,224	<b>x</b> 0.90 =	83,902

Permit #: LA0036412 ·

C. How many months did the monthly flow (Column 1) to the wastewater treatment facility (WWTF) exceed 90% of design flow? Circle the number of months and the corresponding point total. Write the point total in the box below at the right.

D. How many months did the monthly flow (Column 1) to the WWTF exceed the design flow? Circle the number of months and corresponding point total. Write the point total in the box below at the right.

E. How many months did the monthly BOD loading (Column 3) to the WWTF exceed 90% of the design loading? Circle the number of months and corresponding point total. Write the point total in the box below at the right.

F. How many months did the monthly BOD loading (Column 3) to the WWTF exceed the design loading? Circle the number of months and corresponding point total. Write the point total in the box below at the right.

Write 0, 10, 20, 30, 40 or 50 in the F point total box

F Point Total

G. Add together each point total for C through F and place this sum in the box below at the right.

TOTAL POINT VALUE FOR PART 1: 0 (max = 80)

Also enter this value or 80, whichever is less, on the point calculation table on page 16.

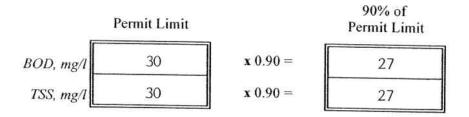
# PART 2: EFFLUENT QUALITY / PLANT PERFORMANCE

2

A. List the monthly average effluent BOD and TSS concentrations produced by your facility during the last reporting year.

Month	Column 1 Average Monthly BOD (mg/l)	Column 2 Average Monthly TSS (mg/l)
JUNE	38	18
JULY	28	19
AUGUST	32	26
SEPTEMBER	32	26
OCTOBER	32	23
NOVEMBER	37	26
DECEMBER	47	31
JANUARY	40	37
FEBRUARY	54	34
MARCH	51	32
APRIL	48	29
MAY	45	29

**B.** List the monthly average permit limits for your facility in the blanks below.



- Permit #: LA0036412
- C. Continuous Discharge to Surface Water.

.

i. How many months did the effluent BOD (Column 1) exceed 90% of the permit limits? Circle the number of months and the corresponding point total. Write the point total in the box below at the right.

months	0	1	2	3	4	5	6	7	8	9	10	11	$\begin{pmatrix} 12 \end{pmatrix}$
months points	0	0	10	20	30	40	40	40	40	40	40	40	$\binom{1}{40}$
													t Total

ii. How many months did the effluent BOD (Column 1) exceed permit limits? Circle the number of months and corresponding point total. Write the point total in the box below at the right.

months	0	1	2	3	4	5	6	7	8	9	10	$\int \mathbf{u}$	12
months points	0	5	5	10	10	10	10	10	10	10	10	( 10)	10
												_	nt Total

iii. How many months did the effluent TSS (Column 2) exceed 90% of the permit limits? Circle the number of months and the corresponding point total. Write the point total in the box below at the right.

months points	0 0	1 0	2 10	3 20	4 30	5 40	$\begin{pmatrix} 6\\40 \end{pmatrix}$	7 40	8 40	9 40	10 40	1 ľ 40	12 40	
							$\bigcirc$							

Write 0, 10, 20, 30 or 40 in the iii point total box

40 iii Point Total

iv. How many months did the effluent TSS (Column 2) exceed permit limits? Circle the number of months and corresponding point total. Write the point total in the box below at the right.

months0123
$$\begin{pmatrix} 4\\ 10 \end{pmatrix}$$
56'789101112points05510101010101010101010Write 0, 5, or 10 in the iv point total box10iv Point Total

v. Add together each point total for i through iv and place this sum in the box below at the right.

TOTAL POINT VALUE FOR PART 2: 100 (max = 100)

Also enter this value or 100, whichever is less, on the point calculation table on page 16.

- D. Other Monitoring and Limitations
- i. At any time in the past year was there and exceedance of a permit limit for other pollutants such as: ammonia-nitrogen, phosphorus, pH, total residual chlorine, or fecal coliform?

√ Check one box.	X Yes	No No	If Yes, Please describe:
FECAL COLIFORM -	1/2-8/2007	624 COL./10	OOML

ii. At any time in the past year was there a "failure" of a Biomonitoring (Whole Effluent Toxicity) test of the effluent?

√ Check one box.	Yes	X No	If Yes, Please describe:

iii. At any time in the past year was there an exceedance of a permit limit for a toxic substance?

$\checkmark$ Check one box.	Yes	X No	If Yes, Please describe:				

# PART 3: AGE OF THE WASTEWATER TREATMENT FACILITY

A. What year was the wastewater treatment facility constructed or last major expansion/ improvements completed?

	5	1998		
Current Year	-	Answer to A	=	Age in years
2007		1998		9

Enter Age in Part C below.

**B.**  $\sqrt{}$  Check the type of treatment facility that is employed.

#### FACTOR:

X	Mechanical Treatment Plant (trickling filter, activated sludge, etc) Specify Type:	2.5
	Aerated Lagoon	2.0
	Stabilization Pond	1.5
	Other Specify Type:	1.0

C. Multiply the factor listed next to the type of facility your community employs by the age of your facility to determine the total point value for Part 3.

#### TOTAL POINT VALUE FOR PART 3 =

$$\frac{2.5}{Factor} \times \frac{9}{Age} = 22.5 \text{ (max = 50)}$$

Also enter this value or 50, whichever is less, on the point calculation table on page 16.

**D.** Please attach a schematic of the treatment plant.

A.					
i.	List the number of times in discharge of untreated or in	the la compl	st year there was an ov etely treated wastewat	verflow, bypass or ter due to heavy ra	unpermitted in:
	V Check one	box.	0 = 0 points	3 = 15 p	oints
			1 = 5 points	4 = 30  p	oints
			2 = 10 points	$\mathbf{X}$ 5 or more	e = 50 points
ii.	List the number of bypasses were within the collection s	s, over ystem	flows or unpermitted of and the number at the	discharges shown i treatment plant	n A (i) that
	Collection System: _	18	1	Freatment Plant:	2
B.					

List the number of times in the last year there was an overflow, bypass or unpermitted i. discharge of untreated or incompletely treated wastewater due to equipment failure, either at the treatment plant or due to pumping problems in the collection system:

43	$\checkmark$ Check one box.	0 = 0 points	3 = 15 points
		1 = 5 points	4 = 30 points
		2 = 10 points	X 5 or more = 50 points

List the number of bypasses, overflows or unpermitted discharges shown in B (i) that ii. were within the collection system and the number at the treatment plant

Collection System: 34

E.

Treatment Plant:

9

- C. Specify whether the bypasses came from the city/village/town sewer system or from contract or tributary communities/sanitary districts, etc...
- Add the point values checked for A and B and place the total in the box below. D.

TOTAL POINT VALUE FOR PART 4: 100 (ma Also enter this value or 100, whichever is less, on the point calculation table on	ux = 100) page 16.
List the person responsible (name and title) for reporting overflows, bypasses or unpermitted discharges to State and Federal authorities:	
CHARLES M. O'BRIEN, WASTEWATER LABORATORY SUPERVISOR (225) 389	)-3240

Describe the procedure for gathering, compiling and reporting:

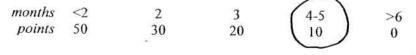
THE PROCEDURE FOR GATHERING, COMPILING, AND REPORTING IS SPECIFIED IN THE PERMIT.

## PART 5: SLUDGE STORAGE AND DISPOSAL SITES

A. Sludge Storage

How many months of sludge storage capacity does your facility have available, either on-site or off-site?

Circle the number of months and the corresponding point total. Write the point total in the box below at the right.

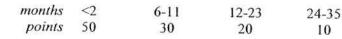


Write 0, 10, 20, 30 or 40 in the A point total box

10 A Point Total

**B.** For how many months does your facility have access to (and approval for) sufficient land disposal sites to provide proper land disposal?

Circle the number of months and the corresponding point total. Write the point total in the box below at the right.



Write 0, 10, 20, 30 or 40 in the B point total box

0 B Point Total

C. Add together the A and B point values and place the sum in the box below at the right:

TOTAL POINT VALUE FOR PART 5: 10 (max = 100)

>36

0

Also enter this value or 100, whichever is less, on the point calculation table on page 16.

PAI	RT 6: NEW DEV	ELOPMEN	Т		
А.	Please provide the for were installed during	ollowing inform g the last year.	ation for the tot	al of all sewer line extensions which	
	Design Population:	2,168			
	Design Flow:	0.29	MGE		
	Design BOD: _	190	mg/l		
В.	Has an industry (or other development) moved into the community or expanded production in the past year, such that either flow or pollutant loadings to the sewerage system were significantly increased (5% or greater)?				
	$\checkmark$ Check one box.	Ye	s = 15 points	X No = 0 points	
	If Yes, Please descri	be:			
C.	List any new polluta Is there any develop 2-3 years, such that e significantly increase √ Check one box. If Yes, Please describ	ment (industrial either flow or po e? Ye:	, commercial or ollutant loadings s = 15 points	residential) anticipated in the next to the sewerage system could X No = 0 points	
	List any new polluta	nts you anticipa	te:		
D,	Add together the point	nt value checke	d in B and C and	d place the sum in the box below.	
		TOTAL	POINT VALU	<b>E FOR PART 6:</b> $0 \pmod{(\max = 30)}$	
	Also enter this va	alue or 30, whic	chever is less, or	the point calculation table on page 16.	

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PAI	RT 7: OPERATOR CERTIFICATION AND EDUCATION		
А.	What was the name of the operator-in-charge for the reporting year?		
	Name: HUGH TAYLOR		
B.	What is his or her certification number: Cert.#: 10-628		
C.	What level of certification is the operator-in-charge required to have to operate the wastewater treatment facility? Level Required: WASTEWATER TREATMENT IV		
n			
D.	What is the level of certification of the operator-in-charge?		
	Level Certified: WASTEWATER TREATMENT IV		
E.	Was the operator-in-charge of the report year certified at least at the grade level required in order to operate this plant?		
	$\sqrt{\text{Check one box.}}$ Yes = 0 points No = 50 points		
	Write 0 or 50 in the E point total box 0 E Point Total		
F.	Has the operator-in-charge maintained recertification requirements during the reporting year?		
	$\sqrt{\text{Check one box.}}$ X Yes No		
G.	How many hours of continuing education has the operator-in-charge completed over the last two calendar years?		
	$\sqrt{\text{Check one box.}}$ $\boxed{X}$ > 12 hours = 0 points $$ < 12 hours = 50 points		
	Write 0 or 50 in the G point total box 0 G Point Total		
H.	Is there a written policy regarding continuing education an training for wastewater treatment plant employees?		
	$\sqrt{\text{Check one box.}}$ X Yes No		
	Explain: REQUIREMENTS: FOR EACH TWO YEAR PERIOD, MUST COMPLETE 16 HOURS OF WASTEWATER TRAINING.		
I.	What percentage of the continuing education expenses of the operator-in-charge were paid for:		
	By the permittee? 100% By the operator? 0%		
J.	Add together the E and G point values and place the sum in the box below at the right.		
	TOTAL POINT VALUE FOR PART 7: $0$ (max = 100)		

.....

•

Also enter this value or 100, whichever is less, on the point calculation table on page 16.

## PART 8: FINANCIAL STATUS

SAME AS B.

A. Are User-Charge Revenues sufficient to cover operation and maintenance expenses?

 $\checkmark$  Check one box. Yes X No If No, How are O&M costs financed?

B. What financial resources do you have available to pay for your wastewater improvements and reconstruction needs?

WASTEWATER IMPROVEMENTS AND RECONSTRUCTION NEEDS ARE FUNDED FROM FOUR MAIN REVENUE SOURCES. THEY ARE A ONE HALF PERCENT SALES AND USE TAX, SEWER USER FEES, SEWER IMPACT FEES, AND A \$4 MILLION SUB-SIDY FROM THE GENERAL FUND SUPPORTED FROM GAMING REVENUES.

## PART 9: SUBJECTIVE EVALUATION

- A. Collection System Maintenance
- i. Describe what sewer system maintenance work has been done in the last year.

SEE ATTACHMENT

ii. Describe what lift station work has been done in the last year.

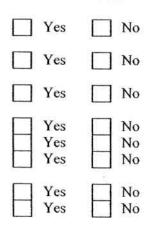
ROUTINE MAINTENANCE

iii. What collection system improvements does the community have under construction for the next 5 years?

SEE ATTACHMENT

- **B.** If you have ponds please answer the following questions:
- i. Do you have duckweed buildup in the ponds?
- ii. Do you mow the dikes regularly (at least monthly), to the waters edge?
- iii. Do you have bushes or trees growing on the dikes or in the ponds?
- iv. Do you have excess sludge buildup (> 1foot) on the bottom of any of your ponds?
- v. Do you exercise all of your valves?
- vi. Are your control manholes in good structural shape?
- vii. Do you maintain at least 3 feet of freeboard in all of your ponds?
- viii. Do you visit your pond system at least weekly?

 $\checkmark$  Check one box.



#### LA0036412 SOUTH PLANT

#### LA MWPP Environmental Audit

#### **PART 9: Subjective Evaluation**

A1. As part of the Consent Decree, Operation and Maintenance of the South Treatment Plant Collection Area is performed and reported on a quarterly basis. The following table is a breakdown/summary of activities performed within the South Treatment Plant Collection System Area during the reporting period.

> South Treatment Area Monitoring Period (6/06 – 5/07)

Line Cleaning	10%
CCTV Inspections	4%
Smoke Testing	0%
Dye Testing	0%
Manhole Inspection	19%
Line Repaired	3%
Manhole Rehabilitation	1%
Force Main-Inspections	60%
Repaired	11%
Air Release Valves-Inspections	182%
Repaired	105%
Wet Well Cleaned	57%
Pump Stations-Repaired	17%

A3. During the next 5 years approximately 29 projects in the South Treatment Plant Collection Area (related to the SSO Consent Decree Program) are scheduled to be implemented, either design or begin construction. The projects will include pump station upgrades, force main improvements, gravity sewers, storage and upgrade and/or expansion of treatment facilities. This list is currently being reviewed and revised by our SSO Program Manger, CH2M Hill. Additionally, annual contracts for sewer rehabilitation including lining, point repair, upsizing, and other rehabilitation methods will also be implemented. Following of a listing of the currently proposed projects.

#### **Proposed Capital Improvement Plan**

The recommended program strategy is to conduct comprehensive rehabilitation of the sewer system in all areas where the rainfall dependent infiltration and inflow (RDII) rate currently exceeds 10 percent of the rainfall volume (i.e., the system R value exceeds 10 percent). This will result in significant reductions in wet-weather flows throughout the City/Parish system, thus improving system performance and controlling system overflows and house back-ups. In addition, the comprehensive rehabilitation program will provide substantial additional benefits in terms of reduced operation and maintenance costs as well as improved structural integrity.

The recommended improvements program includes three categories of improvements. The rehabilitation in each of the basins with R-values in excess of 10 percent is considered part of the Category 1 improvements, which also includes minor pump station modifications needed to boost their pumping head (i.e., new impellors, larger motors, piping modifications).

Sewer and pump station improvement plans were devised to resolve all remaining conveyance deficiencies in each basin. The pump station and conveyance system improvements include capacity increases to the stations and piping. The pump station and conveyance system improvements are referred to as Category 2 improvements. Improvements to provide flow equalization and wastewater treatment enhancements are referred to as Category 3.

#### **Category 1: Comprehensive Sewer Basin Rehabilitation and Pump Station Upgrades**

Based upon sewer system model results and flow monitoring, numerous basins within the Baton Rouge system require comprehensive rehabilitation. The basins identified through the system model are scheduled for rehabilitation based upon the modeled R-values. The first group of basins scheduled for rehabilitation is those with the highest existing R-values.

Category 1 also provides for pump station inspection and mechanical improvements at select pump station to allow for head increase. These improvements include assessing and potentially making mechanical upgrades 41 pump stations in the South SCD/STN area. The assessment of the pump stations will determine specific improvements required to allow each pump station to operate against the system head. Improvements may include replacement of impellers, motors, pumps, and/or piping and will be determined for each station during design.

#### **Category 2: Pump Station and Transmission/Conveyance System Improvements**

The system model was used to identify pump stations and conveyance lines where capacity is not adequate for the peak wastewater flows. Category 2 provides for pump station and conveyance system upgrades in capacity. The projects are generally discussed below.

In the South CSD/STN area, capacity upgrades are required at 35 pump stations. The largest upgrades required based upon model results are at Pump Station 57, Pump Station 58, and Pump Station 514. Pump Station 57 requires an increase in capacity of 76 MGD. Pump Station 58 requires an increase in capacity of 56 MGD, and Pump Station 514 requires an increase in capacity of 52 MGD. This significant capacity increase will likely require construction of a new pump station or significant increase to the existing pump station wet well and pump/pipe systems.

Pipeline capacity improvements include replacement of approximately 126,000 LF of replacement gravity sewer, installation of approximately 174,000 LF of new parallel gravity sewer, approximately 26,000 LF of replacement force main, and 7,000 LF of parallel force main.

- A detailed listing of the pump station and pipelines requiring capacity increases are as follows: Make capacity upgrades to PS50, PS53, PS57 and PS 58 including new parallel force main.
- Replace approximately 14,000 LF of gravity sewer and install approximately 81,000 LF of parallel gravity sewer in PS58 area.
- Replace approximately 26,000 LF gravity sewer and install approximately 34,000 LF of parallel gravity sewer.

Replace approximately 2,500 LF of force main.

#### Area Upstream of PS889

Replace approximately 7,800 LF of gravity sewer.

Replace approximately 9,000 LF of force main and install approximately 200 LF of parallel force main.

Make capacity improvements at PS153, PS100, PS189, PS889 and PS104.

#### Area Upstream of BPS514/East of Highland Road

Make significant capacity upgrade to PS514.

Replace approximately 3,000 LF of gravity sewer and parallel approximately 2,800 LF of gravity sewer.

Assess and potentially make capacity improvements to PS327, PS253, PS278, PS382, and PS343.

#### O'Neal Lane South Area

Assess and potentially make capacity improvements to PS316, PS211, PS296, PS247, and PS213.

Replace approximately 5,000 LF of gravity sewer.

Replace approximately 3,000 LF of force main.

#### Area Upstream of BPS507

Assess and make potential capacity improvements to PS162, PS177, PS274, and PS170.

Make significant capacity improvements to PS777.

Replace approximately 20,000 LF of gravity sewer and parallel over 1,100 LF of gravity sewer.

Replace approximately 1,600 LF of force main and parallel approximately 100 LF of force main.

Area South of I-12/Sherwood Forrest and Jefferson Make capacity improvements to PS287 Replace approximately 1,800 LF of gravity sewer and install approximately 600 LF of parallel gravity sewer.

Replace approximately 1,100 LF of force main.

#### Areas Upstream of PS302/PS27/PS999 Make significant capacity improvements to PS999.

Inspect and potentially make capacity improvements to PS223, PS118, and PS161.

Replace approximately 5,600 LF of gravity sewer.

#### Essen Lane Area South of I-10

Make significant capacity improvements to PS57, PS58, and PS53.

Make capacity improvements at PS56, PS68, and PS91.

Replace approximately 38,000 LF of gravity sewer and parallel approximately 109,000 LF of gravity sewer.

Replace approximately 700 LF of force main and parallel approximately 5,100 LF of force main.

PS236, PS311, PS329, PS102 Make capacity improvements to PS236, PS311, and PS329

Replace approximately 9,300 LF of gravity sewer.

Replace approximately 2,200 LF of force main.

#### **Category 3: Flow Equalization and Wastewater Treatment Improvements**

The conveyance improvements described in the previous sections will increase peak flow to the South WWTP. Therefore, flow equalization and/or treatment capacity improvements will be necessary to address these larger peak flows at the South WWTP.

Sewer rehabilitation will actually decrease dry weather flows in the basins because infiltration of groundwater will be reduced. No redirection of flows from one treatment plant service area to another was found to be beneficial during the development of the program.

Based upon the predicted increase in flow to the South WWTP and the historical performance of the treatment plant, the following improvements to the treatment plant are recommended.

#### New Headworks and Flow Equalization Basin

Peak flows to the South WWTP from the gravity collection system (SCSD) and the force main system (SSTN) will be 273 MGD. If the South WWTP is upgraded to a peak capacity of 200 MGD, flow equalization facilities with the ability to accommodate the remaining 73 MGD are required. A hydrograph shows the time duration of the 73 MGD and it has been determined that the volume needed to store this peak flow would be 19 million gallons. The construction of a new headworks facility with screening, grit removal facilities and influent pumping in the vicinity of

the proposed 19 million gallon equalization basin is required. With a new headworks facility, the two poorly functioning headworks facilities at the South WWTP can be eliminated and the spikes in flow through the plant can be eliminated. Several locations for the new headworks and flow equalization facilities are being evaluated. All three locations are near the existing South WWTP.

#### Upgrade the South WWTP to 200 MGD

A review of the current operating processes will be conducted with possible modifications made in conjunction with the expansion of the South WWTP to 200 MGD. An additional effluent outfall to the Mississippi River is also proposed.

#### Immediate Action Projects (IAP)

The South Wastewater Treatment Plant (South WWTP) is a 120 MGD peak flow secondary treatment plant. The plant is in need of modifications to improve operational and mechanical reliability in order to ensure consistent compliance with the plant's effluent discharge permit limits.

Preliminary investigations have identified the following projects for inclusion in the Immediate Action Plan (IAP) meant to aid the South WWTP in meeting the aforementioned NPDES permit limits:

- New 100 MGD Recirculation Pump Station and Electrical Building
- Piping Interconnection and flow control vaults upstream of the Final Settling Tanks
- Primary Effluent Pump Stations electrical, control, and mechanical modifications
- Chemical addition facilities upstream of the Primary Clarifiers for enhanced settling
- Primary Clarifier mechanical improvements to improve operational reliability
- Gravity Thickeners and Thickened Sludge Pump Station rehabilitation
- Final Settling Tank sludge withdrawal improvements
- Flow Control/Flow Measurement at Multiple Splitter Boxes
- Snail Catcher improvements
- Effluent Pump Station settlement evaluation/repairs
- Belt Filter Press filtrate line improvements
- Potential Bar Screen improvements
- Electrical, instrumentation and control systems associated with the above
- Site grading, paving, and erosion and sedimentation and stormwater control associated with the above improvements
- Architectural, structural, process mechanical, plumbing, and HVAC design requirements associated with the above improvements

- C. Treatment Plants
- i. Have the influent and effluent flow meters been calibrated in the last year?

X Yes  $\square$  No (√ Check one box.)

SEE BELOW Influent flow meter calibration date(s) SEE BELOW Effluent flow meter calibration date(s)

ii. What problems, if any, have been experienced over the last year that have threatened treatment?

PRIMARY BASINS #4 AND #6 REBUILD, REPLACEMENT OF FORCE MAIN AND GRAVITY GRIT DEWATERING SCREWS. BAR SCREENS E-101, E-102 and E-103 MECHANICAL PROBLEM DIGESTERS #3 and #4 CLEANING AND ROOF REPLACEMENT.

iii. Is your community presently involved in formal planning for treatment facility upgrade?

 $\checkmark$  Check one box.  $\square$  Yes  $\square$  No If Yes, Please describe:

GRAVITY INFLUENT CALIBRATION DATES: 5/24/2006, 11/20/2006, 6/18/2007

FORCE MAIN CALIBRATION DATES: 6/7/2006, 11/20/2006, 6/18/2007

FINAL EFFLUENT CALIBRATION DATES: 5/18/2006, 12/6/2006, 12/7/2006

#### D. Preventive Maintenance

i. Does your plant have a written plan for preventive maintenance on major equipment items?

√ Check one box. X Yes No If Yes, Please describe:
Weekly, monthly and semi-annually preventive maintenance sheets that reflect type and frequency as specified in the 0 & M manuals. A new computer program will manage the maintenance and preventive maintenance of plant equipment and spare parts.

ii. Does this preventive maintenance program depict frequency of intervals, types of lubrication and other preventive maintenance tasks necessary for each piece of equipment?

X	Yes	No
_		

iii. Are these preventive maintenance tasks, as well as equipment problems, being recorded and filed so future maintenance problems can be assured properly?

X	Yes	No
---	-----	----

- E. Sewer Use Ordinance
- i. Does your community have a sewer use ordinance that limits or prohibits the discharge of excessive conventional pollutants (BOD, TSS or pH) or toxic substances to the sewer system from industries, commercial users and residences?

 $\vee$  Check one box. X Yes No If Yes, Please describe:

Sewer User Fee Ordinance (No. 7853) limits the discharge of BOD & TSS to 200mg/l and 250mg/l respectively. Any discharge above these limits is surcharged at a rate of 2% of the monthly sewer user fee for each limit of 10mg/l. Pretreatment Ordinance (No. 9195) limits the discharge of heavy metals, chemicals and toxic substances.

ii. Has it been necessary to enforce?

 $\sqrt{\text{Check one box.}}$  X Yes No

If Yes, Please describe:

The Sewer User Fee Ordinance is strictly enforced by City-Parish and self monitoring sampling. The same apply to the Pretreatment Ordinance. Enforcement mechanisms include discharge permits, surcharges, letter and notice of violations, administrative orders, water termination and fines.

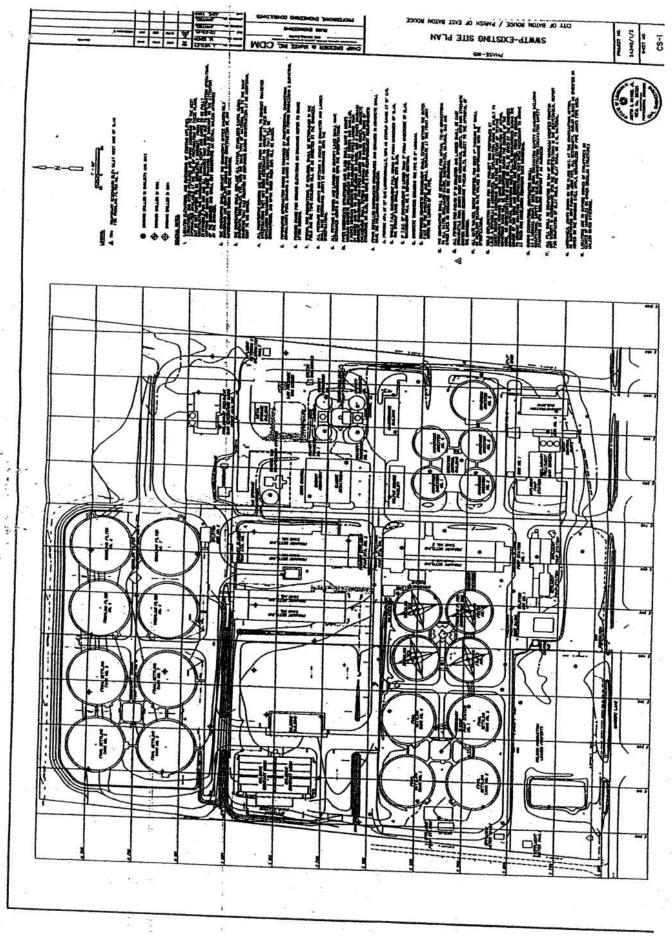
iii. Any additional comments about your treatment plant or collection system? (Attach additional sheets if necessary.)

## POINT CALCULATION TABLE

	Actual Values	Maximum
Part 1: Influent Flow/Loadings	0	80 points
Part 2: Effluent Quality / Plant Performance	100	100 points
Part 3: Age of WWTF	22.5	50 points
Part 4: Overflows and Bypasses	100	100 points
Part 5: Ultimate Disposition of Sludge	10	100 points
Part 6: New Development	0	30 points
Part 7: Operator Certification Training	0	100 points

TOTAL POINTS:

	1
232.5	



## **ATTACHMENT 3**

#### SAMPLE MWPP RESOLUTION

 Resolved that the village/town/city of BATON ROUGE
 informs the

 Louisiana Department of Environmental Quality that the following actions were taken by
 CITY/PARISH

 (governing body).

- 1. Resolved the Municipal Water Pollution Prevention Environmental Audit Report which is attached to this resolution.
- Set forth the following actions necessary to maintain permit requirements contained in the Louisiana Pollution Discharge Elimination System (LPDES) permit, number LA 0036412

(Please be specific in listing the actions that will be taken to address the problems identified in the audit report.)

- a. CURRENTLY, WE ARE OPERATING UNDER A CONSENT DECREE WHICH BECAME EFFECTIVE MARCH 14, 2002.
- b. A PROJECT IS UNDERWAY TO REDUCE THE HIGH CONCENTRATION OF HYDROGEN SULFIDE (H2S).
- c.
- d.

etc..

CLERK

"Yeas": Messrs: Addison, Culbertson, Greco, Kelly, Sharper Skyring, Walker and Mmes. Burgess and Tassin. "Nays": None.

Absent: Messrs: Boneno, Carter and Ourso

ADOPTED METROPOLITAN COUNCIL SEP 1 2 2007 RESOLUTION 45721 COUNCIL ADM REQUESTING APPROVAL FOR SUBMITTAL OF THE LOUISIANA MUNICIPAL WATER POLLUTION PREVENTION (MWPP) ENVIRONMENTAL AUDIT FOR THE SOUTH TREATMENT PLANT TO THE DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) FOR THE MONITORING PERIOD OF JUNE 1, 2006 THROUGH MAY 31, 2007.

073

BE IT RESOLVED by the Metropolitan Council of the Parish of East Baton Rouge and City of Baton Rouge that the submittal of the Louisiana Municipal Water Pollution Prevention (MWPP) Environmental Audit Report for the South Treatment Plant to the Department of Environmental Quality (DEQ) for the monitoring period of June 1, 2006 through May 31, 2007, is hereby approved.



#### **Department of Public Works**

City of Baton Rouge Parish of East Baton Rouge

Post Office Box 1471 Baton Rouge, Louisiana 70821

May 24, 2007



Department of Environmental Quality Office of Environmental Compliance Permits Compliance Unit Post Office Box 4312 Baton Rouge, Louisiana 70821-4312

Re: Municipal Water Pollution Prevention (MWPP) Environmental Audit Report

LPDES PERMIT NUMBER: LA0036439 AI# 4843

Dear Sirs:

As required by your office, we are submitting the annual Municipal Water Pollution Prevention Environmental Audit report along with the MWPP Resolution. This report represents our North Wastewater Treatment Plant from April 1, 2006 to March 31, 2007.

If you have any questions concerning this matter, please contact Mr. Charles O'Brien of my staff at (225) 389-3240.

Sincerely yours,

Peter T. Newkirk, PE Public Works Director

PTN/WJ/pas

xc:

Wade Shows, Parish Attorney Walter Jenkins, Wastewater Treatment Plant Manager Garcia Dialekwa, Assistant Wastewater Treatment Plant Manager Cheryl Berry, PE III Charles M. O'Brien, Wastewater Laboratory Supervisor

Attachment(s):

# LOUISIANA

MUNICIPAL WATER POLLUTION PREVENTION

# MWPP



Facility Name:	NORTH TREATMENT PLANT
LWDPS Permit Number:	
NPDES Permit Number:	LA0036439 AI# 4843
Address:	55 MILLS AVENUE
	BATON ROUGE
	LOUISIANA
Parish:	EAST BATON ROUGE
(Person Completing Form) Name:	CHARLES M. O'BRIEN
Title:	WASTEWATER LABORATORY SUPERVISOR
Date Completed:	MAY 24, 2007

# **Instructions to the Operator-in-Charge**

- 1. Complete only the sections of the Environmental Audit which apply to your wastewater treatment system. Leave sections that do not apply blank and enter a "0" for the point value.
- 2. Parts 1 through 7 contain questions for which points may be generated. These points are intended to communicate to the department and the governing body or owner what actions will be necessary to prevent effluent violations. Place the point totals from parts 1 through 7 on the Point Calculation page.
- 3. Add up the point totals.
- 4. Submit the Environmental Audit to the governing body or owner for their review and approval.
- 5. The governing body must pass a resolution which contains the following items:
  - a. The resolution or letter must acknowledge the governing body or owner has reviewed the Environmental Audit.
  - b. The resolution must indicate <u>specific</u> actions, if any, will be taken to maintain compliance and prevent effluent violations. Proposed actions should address the parts where maximum or close to maximum points were generated in the Environmental Audit.
  - c. The resolution should provide any other information the governing body deems appropriate.

## PART 1: INFLUENT FLOW/LOADINGS

Part 1: Influent Flow/Loadings (All plants)

A. List the average monthly volumetric flows and BOD loadings received at your facility during the last reporting year.

Col. 1 Average Monthly Flow (million gallons per day, MGD)	a	Col. 2 Average Monthly BOD <sub>5</sub> Concentration (mg/l)	24 5.	Col. 3 Average Monthly BOD <sub>5</sub> Loading (pounds per day)
14.39	x	127	X 8.34 =	15,242
12.63	x	132	X 8.34 =	13,904
12.91	x	126	X 8.34 =	13,566
17.16	x	102	X 8.34 =	14,598
17.64	х	101	X 8.34 =	14,859
15.88	х	101	X 8.34 =	13,376
19.89	х	97	X 8.34 =	16,091
15.94	х	113	X 8.34 =	15,022
20.39	х	120	X 8.34 =	20,406
25.00	x	80	X 8.34 =	16,680
17.50	x	119	X 8.34 =	17,368
16.46	x	124	X 8.34 =	17,022

BOD loading = Average Monthly Flow (in MGD) x Average Monthly BOD concentration (in mg/l) x 8.34.

B. List the design flow and design BOD loading for your facility in the blanks below. If you are not aware of these design quantities, refer to your Operation and Maintenance Manual (O & M) or contact your consulting engineer.

Design Flow, MGD	54	X 0.90 =	48.60	
Design BOD, lb/day	75,210	X 0.90 =	67,689	

LA0036439 NORTH PLANT

C. How many months did the monthly flow (Col. 1) to the wastewater treatment plant (WWTP) exceed 90% of design flow?

Circle the number of months and corresponding point total. Write the point total in the box below at the right.

months	(0)	1	2	3	4	5	6	7	8	9	10	11	12	months
points	(0)	0	0	0	0	5	5	5	5	5	5	5	5	points
	$\cup$			W	rite O	or 5	in the	e C po	oint to	otal b	ox C	)	C P	oint Total

D. How many months did the monthly flow (Col. 1) to the WWTP exceed the design flow? Circle the number of months and corresponding point total. Write the point total in the box below at the right.

months points	0	1	2	3	4	5	6	7	8	9	10	11	12	months
points	0/	5	5	10	10	15	15	15	15	15	15	15	15	points
	$\bigcirc$		Write	0, 5,	10, o	r 15 i	n the	D po	int to	tal bo	x	0	DP	oint Total

E. How many months did the monthly BOD loading (Col. 3) to the WWTP exceed 90% of the design loading?

Circle the number of months and corresponding point total. Write the point total in the box below at the right.

months	0	1	2	3	4	5	6	7	8	9	10	11	12	months
points	0/	0	5	5	5	10	10	10	10	10	10	10	10	points
	$\sim$		V	Vrite (	), 5, 0	or 10	in the	E po	oint to	otal bo	x	0	E Po	oint Total

F. How many times did the monthly BOD loading (Col. 3) to the WWTP exceed the design loading? Circle the number of months and corresponding point total. Write the point total in the box below at the right.

months points	(0)	1	2	3	4	5	6	7	8	9	10	11	12	months
points	0/	10	20	30	40	50	50	50	50	50	50	50	50	points
	V	Wı	ite 0,	10, 2	0, 30	, 40,	or 50	in th	e F p	oint t	otal b	ox	0	F Point Total

G. Add together each point total for C through F and place this sum in the box below at the right.

TOTAL POINT VALUE FOR PART 1 0 (max=80)

Also enter this value on the point calculation table on page 16.

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# PART 2: EFFLUENT QUALITY/PLANT PERFORMANCE

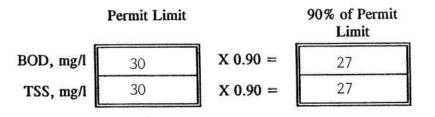
A. List the monthly average effluent BOD and TSS concentrations produced by your facility during the last reporting year.

Month	Column 1 Avg. Monthly BOD (mg/l)
APRIL	19
MAY	27
JUNE	22
JULY	16
AUGUST	17
SEPTEMBER	15
OCTOBER	16
NOVEMBER	. 28
DECEMBER	28
JANUARY	17
FEBRUARY	27
MARCH	25

Column 2 Avg. Monthly TSS (mg/l)

14
. 20
15
14
15
15
17
22
24
16
16
19

B. List the monthly average permit limits for your facility in the blanks below.



LA0036439 NORTH PLANT

#### Continuous Discharge to Surface Water

C.

 How many months did the effluent BOD concentration (Col. 1) exceed 90% of permit limits? Circle the number of months and corresponding point total. Write the point total in the box below at the right.

months	0	1	$\left(2\right)$	3	4	5	6	7	8	9	10	11	12	months
months - points	0	0	10	20	30	40	40	40	40	40	40	40	40	points
		Wr	ite 0,	10, 20	), 30	or 40	in th	e i po	oint to	tal bo	<b>x</b> 1	0	i Po	int Total

 How many months did the effluent BOD concentration (Col. 1) exceed permit limits? Circle the number of months and corresponding point total. Write the point total in the box below at the right.

months	(0)	1	2	3	4	5	6	7	8	9	10	11	12	months
points	(0)	5	5	10	10	10	10	10	10	10	10	10	10	points
	$\sim$		V	Vrite 0	, 5, 0	or 10	in the	ii po	int to	tal bo	x	С	ii Po	oint Total

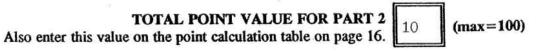
iii. How many months did the effluent TSS concentration (Col. 2) exceed 90% of permit limits? Circle the number of months and corresponding point total. Write the point total in the box below at the right.

months	(0)	1	2	3	4	5	6	7	8	9	10	11	12	months
points	0)	0	10	20	30	40	40	40	40	40	40	40	40	points
	$\cup$	Write	0, 10	, 20,	30, o	r 40 i	n the	iii po	int to	tal bo	x	0	iii P	oint Total

iv. How many months did the effluent TSS concentration (Col.2) exceed permit limits? Circle the number of months and corresponding point total. Write the point total in the box below at the right.

months	$\left( 0 \right)$	1	2	3	4	5	6	7	8	9	10	11	12	months
points	0/	5	5	10	10	10	10	10	10	10	10	10	10	points
	V			W	rite (	), 5, 0	or 10	in the	e iv p	oint t	otal b	ox	0	iv Point Total

v. Add together each point total for i through iv and place this sum in the box below at the right.



Facility Name LA0036439 NORTH PLANT

#### Other Monitoring and Limits D.

At any time in the past year was there an exceedance of a permit limit for other pollutants such as: i. ammonia-nitrogen, phosphorus, pH, residual chlorine, or fecal coliform?

🗆 Yes 🖾 No If yes, please describe: ✓ Check one box

At any time in the past year was there a "failure" of a Biomonitoring (Whole Effluent Toxicity) test of the ii. effluent?

✓ Check one b	юx	🗆 Yes 🖾 No	If yes, please describe:	
		3		
			<u>8</u>	

At any time in the past year was there an exceedance of a permit limit for a toxic substance? iii.

If yes, please describe: ✓ Check one box 🗆 Yes 🖾 No

Facility Name | LA0036439 NORTH PLANT

### PART 3: AGE OF THE WASTEWATER TREATMENT FACILITIES

A. What year was the wastewater treatment plant constructed or last major expansion/improvements completed? 1998

Current Year - (Answer to A) = Age in years 2007 - 1998 = 9 years

Enter Age in Part C below.

B. Check the type of treatment facility that is employed:

Factor

X	Mechanical Treatment Plant (Trickling filter, activated sludge, etc.) Specify Type Trickling Filter	2.5
	Aerated Lagoon	2.0
	Stabilization Pond	1.5
	Other (Specify)	1.0

C. Multiply the factor listed next to the type of facility your community employs by the age of your facility to determine the total point value of Part 3:



Also enter this value or 50, which ever is less, on the point calculation table on page 16.

D. Please attach a schematic of the treatment plant.

Facility Name LA0036439 NORTH PLANT

.

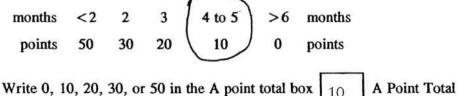
PAR	RT 4:	OVERFLOWS AND BYPASSES
Α.	(1)	List the number of times in the last year there was an overflow, bypass, or unpermitted discharge of untreated or incompletely treated wastewater due to heavy rain:
8		(Circle One) $\underbrace{0 = 0 \text{ points}}_{3 = 15 \text{ points}}$ 1 = 5 points 2 = 10 points 4 = 30 points 5 or more = 50 points
		3 = 15 points $4 = 30$ points $5$ or more = 50 points
	(2)	List the number of bypasses, overflows, or unpermitted discharges shown in A (1) that were within the collection system and the number at the treatment plant.
		Collection System 0 Treatment Plant 0
B.	(1)	List the number of times in the last year there was a bypass or overflow of untreated or incompletely treated wastewater due to equipment failure, either at the treatment plant or due to pumping problems in the collection system:31
		(Circle One) $0 = 0$ points $1 = 5$ points $2 = 10$ points
		3 = 15 points $4 = 30$ points (5 or more = 50 points)
	(2)	List the number of bypasses or overflows shown in B (1) that were within the collection system and the number at the treatment plant.
		Collection System 28 Treatment Plant 3
C.		fy whether the bypasses came from the city or village sewer system or from contract or tributary nunities/sanitary districts, etc.
D.	Add	the point values circled for A and B and place the total in the box below.
		TOTAL POINT VALUE FOR PART 4 50 (max=100)
		Also enter this value on the point calculation table on page 16.
E.		the person responsible for reporting overflows, bypasses, or unpermitted discharges to State and ral authorities:
		HARLES M. O'BRIEN, WASTEWATER LABORATORY SUPERVISOR
	Č	225) 389-3240
		1
	Desc	cribe the procedure for gathering, compiling, and reporting:
	. T I	THE PROCECURE FOR GATHERING, COMPILING AND REPORTING IS SPECIFIED IN THE PERMIT.

### PART 5: SLUDGE STORAGE AND DISPOSAL SITES

A. Sludge Storage

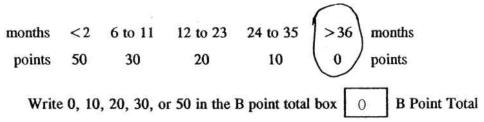
How many months of sludge storage capacity does your wastewater treatment facility have available, either on-site or off-site?

Circle the number of months and corresponding point total. Write the point total in the box below at the right.



B. For how many months does your facility have access to (and approval for) sufficient land disposal sites to provide proper land disposal?

Circle the number of months and corresponding point total. Write the point total in the box below at the right.



C. Add together the A and B point values and place this sum in the box below at the right:

TOTAL POINT VALUE FOR PART 5 10 (max=100)

Also enter this value on the point calculation table on page 16.

•

Facility Name LA0036439 NORTH PLANT

PAR	T 6: NEW DEVELOPMENT
Α.	Please provide the following information for the total of all sewer line extensions which were installed during the last year.
	Design Population:100
	Design Flow: 0.01 MGD
	Design BOD <sub>5</sub> : <u>96</u> mg/l
B.	Has an industry (or other development) moved into the community or expanded production in the past year, such that either flow or pollutant loadings to the sewerage system were significantly increased (5% or greater)? (Circle One) $No = 0$ points Yes = 15 points
	Describe:
C.	List any new pollutants:
	List any new pollutants that you anticipate:
D.	Add together the point value circled in B and C and place the sum in the blank below.
	TOTAL POINT VALUE FOR PART 6 0 (max=30)
	Also enter this value on the point calculation table on page 16.

Facility Name LA0036439 NORTH PLANT

PAR	T 7: OPERATOR CERTIFICATION AND EDUCATION
Α.	What was the name of the operator-in-charge for the reporting year? DAVID WHITE Name
В.	What is his/her certification number? 19-269 Cert. #
C.	What level of certification is the operator-in-charge required to have to operate the wastewater treatment plant?
D.	What is the level of certification of the operator-in-charge? <u>WASTEWATER TRMT. IV</u> Level Certified
E.	Was the operator-in-charge of the report year certified at least at the grade level required in order to operate this plant? $\checkmark$ Check one box $\square$ yes = 0 points $\square$ no = 50 points Write 0 or 50 in the E point total box $\bigcirc$ E Point Total
F.	Has the operator-in-charge maintained recertification requirements during the reporting year? ✓ Check one box
G.	How many hours of continuing education has the operator-in-charge completed over the last two calendar years? ✓ Check one box ⊠ 12 hours or more = 0 points □ Less than 12 hours = 50 points Write 0 or 50 in the G point total box 0 G Point Total
H.	Is there a written policy regarding continuing education and training for wastewater treatment plant employees? $\checkmark$ Check one box $\boxtimes$ yes $\Box$ no
	Explain:
	16 HOURS OF TRAINING IN WASTEWATER TREATMENT EVERY 2 YEARS.
I.	What percentage of the continuing education expenses of the operator-in-charge were paid for:
	By the permittee? 100%
	By the operator?0
Ŧ	Add search on the Frend Constant values and allow this same in the barry below of the sinds:

Add together the E and G point values and place this sum in the box below at the right: J.

> TOTAL POINT VALUE FOR PART 7 0 (max=100)

Also enter this value on the point calculation table on page 16.

Facility Name

### PART 8: FINANCIAL STATUS

A. Are User-Charge Revenues sufficient to cover operation and maintenance expenses?
 ✓ Check one box □ Yes □ No If no, how are O & M costs being financed?

Explain:

SAME AS B

B. What financial resources do you have available to pay for your wastewater improvements and reconstruction needs?

WASTEWATER IMPROVEMENTS AND RECONSTRUCTION NEEDS ARE FUNDED FROM FOUR MAIN REVENUE SOURCES. THEY ARE A ONE HALF PERCENT SALES & USE TAX, SEWER USER FEES, SEWER IMPACT FEES, AND A \$4 MILLION SUBSIDY FROM THE GENERAL FUND SUPPORTED FROM GAMING REVENUES.

 $\Box$  Yes  $\Box$  No

□ Yes □ No

### PART 9: SUBJECTIVE EVALUATION

- A. Collection System Maintenance
  - 1. Describe what sewer system maintenance work has been done in the last year.

SEE ATTACHMENT

Describe what lift station work has been done in the last year.

ROUTINE MAINTENANCE

3. What collection system improvements does the community have under consideration for the next 5 years?

SEE ATTACHMENT

- B. If you have ponds, please answer the following questions:
  - 1. Do you have duckweed buildup in your ponds?
  - 2. Do you mow your dikes regularly (at least monthly), to the waters edge?
  - 3. Do you have bushes or trees growing on the dikes or in the ponds?
  - 4. Do you have excess sludge buildup (>1 foot) on the bottom of any of your ponds? 
    Yes No
  - 5. Do you exercise all of your valves?
  - 6. Are your control manholes in good structural shape?
  - 7. Do you maintain at least three feet of freeboard in all your ponds?
  - 8. Do you visit your pond system, at least weekly?

#### LA0036439 NORTH PLANT

#### LA MWPP Environmental Audit

#### Part 9: Subjective Evaluation

**A1.** As part of the Consent Decree, Operation and Maintenance of the North Treatment Plant Collection Area is performed and reported on a quarterly basis. The following table is a breakdown / summary of activities performed within the North Treatment Plant Collection System Area during the reporting period.

Line Cleaned	9.7%
CCTV Inspected	0.1%
Smoke Tested	0.5%
Dye Tested	0.0%
Manhole Inspected	15.7%
Line Repaired	10.0%
Manhole Rehabilitated	2.5%
Force Main – Inspected	87.6%
Repaired	5.0%
Air Release Valves - Inspected	213.7%
Repaired	85.7%
Wet Wells Cleaned	92.2%
Pump Stations - Repaired	23.4%

#### North Treatment Area Monitoring Period (4/06- 3/07)

A3. During the next 5 years, 15 - 20 projects in the North Treatment Plant Collection Area (related to the SSO Consent Decree Program) are scheduled to be implemented. The projects will include pump stations upgrades, force main improvements, gravity sewers, and wet weather treatment facilities. Additionally, annual contracts for sewer rehabilitation including lining, point repair, upsizing, and other rehabilitation methods will also be implemented. Plans are being developed for a comprehensive odor control program for the North Treatment Plant and Collection Area. However, a change in the Consent Decree has been submitted for review and approval, and any approved changes may affect the currently proposed projects. Attached is a more detailed description of the Proposed Capital Improvement Plan.

### Future North Wastewater Treatment Plant Collection System Improvements

### **Proposed Capital Improvement Plan**

The recommended program strategy is to conduct comprehensive rehabilitation of the sewer system in all areas where the rainfall dependent infiltration and inflow (RDII) rate currently exceeds 10 percent of the rainfall volume (i.e., the system R value exceeds 10 percent). This will result in significant reductions in wet-weather flows throughout the City/Parish system, thus improving system performance and controlling system overflows and house back-ups. In addition, the comprehensive rehabilitation program will provide substantial additional benefits in terms of reduced operation and maintenance costs as well as improved structural integrity.

The recommended improvements program includes three categories of improvements. The rehabilitation in each of the basins with R-values in excess of 10 percent is considered part of the Category 1 improvements, which also includes minor pump station modifications needed to boost their pumping head (i.e., new impellors, larger motors, piping modifications).

Sewer and pump station improvement plans were devised to resolve all remaining conveyance deficiencies in each basin. The pump station and conveyance system improvements include capacity increases to the stations and piping. The pump station and conveyance system improvements are referred to as Category 2 improvements.

### **Category 1: Comprehensive Sewer Basin Rehabilitation and Pump Station Upgrades**

Based upon sewer system model results and flow monitoring, numerous basins within the Baton Rouge system require comprehensive rehabilitation. The basins identified through the system model are scheduled for rehabilitation based upon the modeled R-values. The first group of basins scheduled for rehabilitation is those with the highest existing R-values.

Category 1 also provides for pump station inspection and mechanical improvements at select pump station to allow for head increase. These improvements include assessing and potentially making mechanical upgrades at approximately 43 pump stations in the North CSD/STN area. The assessment of the pump stations will determine specific improvements required to allow each pump station to operate against the system head. Improvements may include replacement of impellers, motors, pumps, and/or piping and will be determined for each station during design.

### Category 2: Pump Station and Transmission/Conveyance System Improvements

The system model was used to identify pump stations and conveyance lines where capacity is not adequate for the peak wastewater flows. Category 2 provides for pump station and conveyance system upgrades in capacity. The projects are generally discussed below.

### North CSD/STN Area

### PS106/155/198/181 Areas

 Replace approximately 2,000 LF of gravity sewer in PS155 area and 3800 LF of gravity sewer in remaining pump station areas.

### Area Upstream of PS509

- Make capacity upgrades to PS234, PS500, and PS218.
- Replace approximately 7,400 LF of force main in PS509, PS72, PS234, and PS103 areas.
- Replace approximately 300 LF of gravity sewer.

### Area Upstream of PS510

- Make capacity upgrade to PS113.
- Replace approximately 15,600 LF of force main.
- Replace approximately 1,100 LF of gravity sewer.

### Area Upstream of PS511

- Make capacity upgrade to PS230, PS231, and PS196.
- Replace approximately 7,700 LF of force main.
- Replace approximately 3,000 LF of gravity sewer.

### Area Upstream of PS503

- Make capacity upgrade to PS183.
- Replace approximately 5,300 LF of gravity sewer and parallel approximately 1,450 LF of gravity sewer.

### Area Upstream of PS897

- Make capacity upgrade to PS94.
- Replace approximately 3,600 LF of force main.
- Replace approximately 650 LF of gravity sewer.

#### Area Upstream of PS45

- Make capacity upgrade to PS45, PS63, PS240, PS241 and PS80
- Replace approximately 2,600 LF of force main in the PS45 and PS63 areas.
- Replace approximately 5,300 LF of gravity sewer and parallel approximately 22,000 LF of gravity sewer.

### North Pressure System

Make capacity upgrade to PS39.

- Replace approximately 2,400 LF of force main in PS141, PS47, and PS39 areas.
- Replace approximately 14,000 LF of gravity sewer and parallel approximately 13,200 LF of gravity sewer.

#### North WWTP Gravity Influent Line

- Make capacity upgrade to PS23
- Replace approximately 1,400 LF of force main in PS23 area
- Replace approximately 5,700 LF of gravity sewer and parallel approximately 28,000 gravity sewer.

### Category 3: Flow Equalization and Wastewater Treatment Improvements

Currently there are no plans for flow equalization or other wastewater treatment plant improvements at the North Wastewater Treatment Plant under the Consent Decree mandated program. However, there are plans to provide a comprehensive odor control program for the North Wastewater Treatment Plant.

The improvements shown above have been submitted to the Louisiana Department of Environmental Quality, US Environmental Protection Agency, and the US Department of Justice for review and approval. At the present time, the program outlined above has not been approved by any of these agencies, and is also being modified to some extent by CH2M Hill, the City-Parish's new Program Manager.

Facility Name

LA0036439 NORTH PLANT

### C. Treatment Plants

1. Have the influent and effluent flow meters been calibrated in the last year?  $\boxtimes$  Yes  $\square$  No

Influent flow meter calibration dates(s):	Effluent flow meter calibration date(s):	-
SEE BELOW	SEE BELOW	

2. What problems, if any, have been experienced over the last year that have threatened treatment?

NONE

3. Is your community presently involved in formal planning for treatment facility upgrading?

□ Yes 🖾 No If yes, describe:

#### Preventive Maintenance

1. Does your plant have a written plan for preventive maintenance on major equipment items?

 $\square$  Yes  $\square$  No If yes, describe:

Weekly, monthly and semi-annual preventive maintenance sheets that reflect type and frequency as specified in the O&M manuals. A new computer program will manage the maintenance and preventive maintenance of plant equipment and spare parts.

- 2. Does this preventive maintenance program depict frequency of intervals, types of lubrication, and other preventive maintenance tasks necessary for each piece of equipment?
- 3. Are these preventive maintenance tasks, as well as equipment problems, being recorded and filed so future maintenance problems can be assessed properly?

#### E. Sewer Use Ordinance

1. Does your community have a sewer use ordinance that limits or prohibits the discharge of excessive conventional pollutants (BOD, TSS, or pH) or toxic substances to the sewer from industries, commercial users, and residences?

#### ☑ Yes □ No If yes, describe:

Sewer User Fee Ordinance (No. 7853) limits the discharge of BOD & TSS to 200 mg/l and 250 mg/l respectively. Any discharge above these limits is surchaged at a rate of 2% of the monthly sewer user fee for each limit of 10 mg/l. Pretreatment ordinance (No. 9195) limits the discharge of heavy metals, chemicals and toxic substances.

2. Has it been necessary to enforce? ⊠ Yes □ No If yes, describe:

The Sewer User Fee Ordinance is strictly enforced by City-Parish and self monitoring sampling. The same apply to the Pretreatment Ordinance. Enforce mechanisms include discharge permits, surcharges, letter and notice of violations, administrative orders, water termination and fines.

F. Any additional comments about your treatment plant or collection system? (Attach additional sheet if necessary.)

NO

### POINT CALCULATION TABLE

Fill in the values from parts 1 through 7 in the columns below. Add the numbers in the left column to determine the point total that the wastewater system has generated for the previous year.

Actual Values	Actual Values	Maximum			
Part 1: Influent Flow/Loadings	0	80 Points			
Part 2: Effluent Quality/Plant Performance	10	100 Points			
Part 3: Age of WWTT	22.5	50 Points			
Part 4: Overflows and Bypasses	50	100 Points			
Part 5: Ultimate Disposition of Sludge	10	100 Points			
Part 6: New Development	0	30 Points			
Part 7: Operator Certification Training	0	100 Points			

TOTAL POINTS

92.5

### **ATTACHMENT 3**

### SAMPLE MWPP RESOLUTION

 Resolved that the city/town of BATON ROUGE
 informs Louisiana Department of

 Environmental Quality that the following actions were taken by the CITY/PARISH
 (governing body).

 METROPOLITAN COUNCIL
 (governing body).

- 1. Reviewed the Municipal Water Pollution Prevention Environmental Audit Report which is attached to this resolution.
- 2. Set forth the following actions necessary to maintain permit requirements contained in the Louisiana Water Discharge Permit System (LWDPS) number LA0036439 AI# 4843.

(Please be specific in listing the actions that will be taken to address the problems identified in the audit report.)

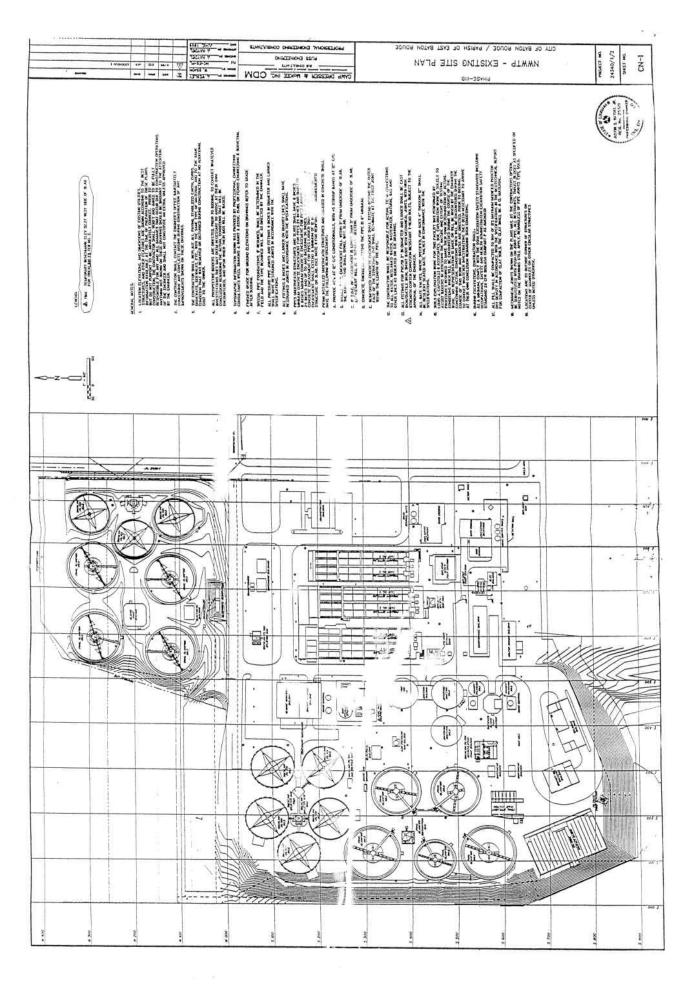
- a. CURRENTLY, WE ARE OPERATING UNDER A CONSENT DECREE WHICH BECAME EFFECTIVE MARCH 14, 2002.
- b. IMPLEMENTATION OF AGGRESSIVE PROCESS CONTROL STRATEGIES.
- c. A PROJECT IS UNDERWAY TO REDUCE THE HIGH CONCENTRATION OF HYDROGEN SULFIDE (H\_2S).
- d.

etc.

Passed by a majority/unanimous (circle one)	vote of the	CITY/PARISH METROPOLITAN	
COUNCIL,		JUNE 20, 2007	(date).

06-20-2007

CLERK



ADOPTED METROPOLITAN COUNCIL

JUN 1 3 2007

RESOLUTION 455/5 May May

COUNCIL ADMINISTRATOR TREASURE REQUESTING APPROVAL FOR SUBMITTAL OF THE LOUISIANA MUNICIPAL WATER POLLUTION PREVENTION (MWPP) ENVIRONMENTAL AUDIT FOR THE NORTH TREATMENT PLANT TO THE DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) FOR THE MONITORING PERIOD OF APRIL 1, 2006 THROUGH MARCH 31, 2007.

BE IT RESOLVED by the Metropolitan Council of the Parish of East Baton Rouge and City of Baton Rouge that the submittal of the Louisiana Municipal Water Pollution Prevention (MWPP) Environmental Audit Report for the North Treatment Plant to the Department of Environmental Quality (DEQ) for the monitoring period of April 1, 2006 through March 31, 2007, is hereby approved.

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### **Department of Public Works**

City of Baton Rouge Parish of East Baton Rouge

Post Office Box 1471 Baton Rouge, Louisiana 70821

September 26, 2007

Department of Environmental Quality Office of Environmental Compliance Permits Compliance Unit Post Office Box 4312 Baton Rouge, Louisiana 70821-4312

Re: Municipal Water Pollution Prevention (MWPP) Environmental Audit Report

LPDES PERMIT NUMBER: LA0036421 AI# 4842

Dear Sirs:

As required by your office, we are submitting the annual Municipal Water Pollution Prevention Environmental Audit report along with the MWPP Resolution. This report represents our Central Wastewater Treatment Plant from September 1, 2006 to August 31, 2007.

If you have any questions concerning this matter, please contact Mr. Charles M. O'Brien of my staff at (225) 389-3240.

Sincerely yours,

101

Peter T. Newkirk, PE Public Works Director

PTN/CB/pas

Wade Shows, Parish Attorney
 Cheryl Berry, PE, Plant Engineer
 Walter Jenkins, Wastewater Treatment Plant Manager
 Garcia Dialekwa, Assistant Wastewater Treatment Plant Manager

Attachment(s):

### CITY-PARISH DEPARTMENTAL MEMORANDUM

Date September 26, 2007

To: Peter T. Newkirk, PE, Public Works Director

From: Cheryl Berry, PE, Plant Engineer

Subject: Municipal Water Pollution Prevention (MWPP) Environmental Audit Report

As required by the Louisiana Department of Environmental Quality, we are submitting our annual MWPP Environmental Audit Report for approval. This report is to be placed on the agenda for the October 2007 City/Parish Metropolitan Council meeting. Upon approval, please return to Wastewater Treatment and Disposal for submission to LDEQ.

CB/CMO/pas

# LOUISIANA

MUNICIPAL WATER POLLUTION PREVENTION

# MWPP



Facility Name:

LWDPS Permit Number:

NPDES Permit Number:

Address:

CENTRAL PLANT

LA0036421

2443 RIVER ROAD

BATON ROUGE

LOUISIANA

EAST BATON ROUGE

WARREN BRANDON

Parish:

(Person Completing Form) Name:

Title:

Date Completed:

ASSISTANT WW LAB SUPERVISOR

SEPTEMBER 26, 2007

## **Instructions to the Operator-in-Charge**

- 1. Complete only the sections of the Environmental Audit which apply to your wastewater treatment system. Leave sections that do not apply blank and enter a "0" for the point value.
- 2. Parts 1 through 7 contain questions for which points may be generated. These points are intended to communicate to the department and the governing body or owner what actions will be necessary to prevent effluent violations. Place the point totals from parts 1 through 7 on the Point Calculation page.
- 3. Add up the point totals.
- 4. Submit the Environmental Audit to the governing body or owner for their review and approval.
- 5. The governing body must pass a resolution which contains the following items:
  - a. The resolution or letter must acknowledge the governing body or owner has reviewed the Environmental Audit.
  - b. The resolution must indicate <u>specific</u> actions, if any, will be taken to maintain compliance and prevent effluent violations. Proposed actions should address the parts where maximum or close to maximum points were generated in the Environmental Audit.
  - c. The resolution should provide any other information the governing body deems appropriate.

### PART 1: INFLUENT FLOW/LOADINGS

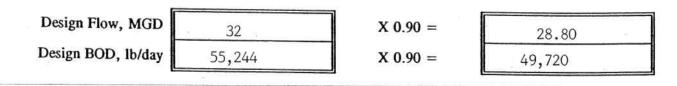
Part 1: Influent Flow/Loadings (All plants)

A. List the average monthly volumetric flows and BOD loadings received at your facility during the last reporting year.

Col. 1 Average Monthly Flow (million gallons per day, MGD)	2	Col. 2 Average Monthly BOD <sub>5</sub> Concentration (mg/l)	9 6	Col. 3 Average Monthly BOD <sub>5</sub> Loading (pounds per day)
10.21	x	135	X 8.34 =	11,495
12.42	x	134	X 8.34 =	13,880
11.18	х	139	X 8.34 =	12,960
12.87	х	138	X 8.34 =	14,812
16.82	x	76	X 8.34 =	10,661
12.58	х	132	X 8.34 =	13,849
11.55	х	138	X 8.34 =	13,293
10.94	x	157	X 8.34 =	14,325
11.83	х	126	X 8.34 =	12,431
10.02	x	149	X 8.34 = ·	12,451
11.52	Х	118	X 8.34 =	11,337
9.77	x	134	X 8.34 =	10,918

BOD loading = Average Monthly Flow (in MGD) x Average Monthly BOD concentration (in mg/l) x 8.34.

B. List the design flow and design BOD loading for your facility in the blanks below. If you are not aware of these design quantities, refer to your Operation and Maintenance Manual (O & M) or contact your consulting engineer.



Facility Name LA0036421

- CENTRAL PLANT
- How many months did the monthly flow (Col. 1) to the wastewater treatment plant (WWTP) exceed 90% C. of design flow?

Circle the number of months and corresponding point total. Write the point total in the box below at the right.

months	0	1	2	3	4	5	6	7	8	9	10	11	12	months
months points	0	) 0	0	0	0	5	5	5	5	5	5	5	5	points
Write 0 or 5 in the C point total box										ox (	С	C P	oint Total	

D. How many months did the monthly flow (Col. 1) to the WWTP exceed the design flow? Circle the number of months and corresponding point total. Write the point total in the box below at the right. 0

months	0	1	2	3	4	5	6	7	8	9	10	11	12	months
months points	0	5	5	10	10	15	15	15	15	15	15	15	15	points
Write 0, 5, 10, or 15 in the D point total box										x (	)	DP	oint Total	

E. How many months did the monthly BOD loading (Col. 3) to the WWTP exceed 90% of the design loading?

Circle the number of months and corresponding point total. Write the point total in the box below at the right.

months	(0)	1	2	3	4	5	6	7	8	9	10	11	12	months
months points	${f U}$	0	5	5	5	10	10	10	10	10	10	10	10	points
			W	/rite (	), 5, 0	or 10 i	in the	E po	int to	tal bo	x	)	E Po	oint Total

F. How many times did the monthly BOD loading (Col. 3) to the WWTP exceed the design loading? Circle the number of months and corresponding point total. Write the point total in the box below at the right.

months	(0)	1	2	3	4	5	6	7	8	9	10	11	12	months
points	$\left( \right)$	10	20	30	40	50	50	50	50	50	50	50	50	months points
	V	Wı	rite 0,	10, 2	0, 30	, 40,	or 50	in th	e F p	oint t	otal b	ox [	0	F Point Total

G. Add together each point total for C through F and place this sum in the box below at the right.

**TOTAL POINT VALUE FOR PART 1** 

(max = 80)

0

Also enter this value on the point calculation table on page 16.

3

Facility Name LA0036421

### PART 2: EFFLUENT QUALITY/PLANT PERFORMANCE

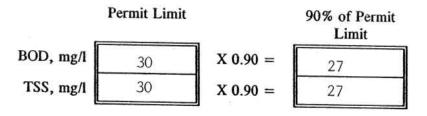
A. List the monthly average effluent BOD and TSS concentrations produced by your facility during the last reporting year.

Month	Column 1 Avg. Monthly BOD (mg/l)
SEPTEMBER	16
OCTOBER	
NOVEMBER	16
DECEMBER	25
JANUARY	<u> </u>
FEBRUARY	32
MARCH	26
APRIL	22
MAY	21
JUNE	20
JULY	19
AUGUST	18

Column 2	
Avg. Monthly	
TSS (mg/l)	

lesson and the second s	( 8-7
1	5
. 14	4
16	5
20	
23	3
22	2
20	)
18	\$
18	8
17	
18	2
15	

B. List the monthly average permit limits for your facility in the blanks below.



### Continuous Discharge to Surface Water

C.

i. How many months did the effluent BOD concentration (Col. 1) exceed 90% of permit limits? Circle the number of months and corresponding point total. Write the point total in the box below at the right.

months -	0	$\left(1\right)$	2	3	4	5	6	7	8	9	10	11	12	months
months - points	0	0	10	20	30	40	40	40	40	40	40	40	40	points
		Wr	ite 0, 1	10, 20	, 30 (	or 40	in th	e i po	int to	tal bo	x	0	i Po	int Total

ii. How many months did the effluent BOD concentration (Col. 1) exceed permit limits? Circle the number of months and corresponding point total. Write the point total in the box below at the right.

months	0	$\left(1\right)$	2	3	4	5	6	7	8	9	10	11	12	months
points	0	5	5	10	10	10	10	10	10	10	10	10	10	points
		V	V	Vrite 0	, 5, 0	r 10	in the	ii po	int to	tal bo	x	5	ii Po	oint Total

iii. How many months did the effluent TSS concentration (Col. 2) exceed 90% of permit limits? Circle the number of months and corresponding point total. Write the point total in the box below at the right.

months	( 0 )	1	2	3	4	5	6	7	8	9	10	11	12	months points
points	0)	0	10	20	30	40	40	40	40	40	40	40	40	points
	Ŭ	Write	0, 10	, 20,	30, o	: 40 i	n the	iii po	int to	tal bo	x	0	iii P	oint Total

iv. How many months did the effluent TSS concentration (Col.2) exceed permit limits? Circle the number of months and corresponding point total. Write the point total in the box below at the right.

months points	( )	1	2	3	4	5	6	7	8	9	10	11	12	months
points	$\bigcirc$	5	5											
				W	rite (	), 5, 0	or 10	in the	e iv p	oint to	otal b	ox	0	iv Point Total

v.

Add together each point total for i through iv and place this sum in the box below at the right.

TOTAL POINT VALUE FOR PART 2 5 (max=100)

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Facility Name

CENTRAL PLANT LA0036421

Other Monitoring and Limits

D.

At any time in the past year was there an exceedance of a permit limit for other pollutants such as: i. ammonia-nitrogen, phosphorus, pH, residual chlorine, or fecal coliform?

🖾 Yes 🗆 1	No If yes, please describe:	
01/2-8/2007	468 col./100ml	
0179-15/2007	418 col./100ml	

At any time in the past year was there a "failure" of a Biomonitoring (Whole Effluent Toxicity) test of the ii. effluent?

✓ Check one box If yes, please describe: 🗆 Yes 🖾 No

At any time in the past year was there an exceedance of a permit limit for a toxic substance? iii.

✓ Check one box □ Yes 🖾 No If yes, please describe:

### PART 3: AGE OF THE WASTEWATER TREATMENT FACILITIES

A. What year was the wastewater treatment plant constructed or last major expansion/improvements completed? 1998

Current Year - (Answer to A) = Age in years

2007 - 1998 = 9 years

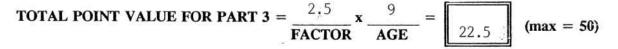
Enter Age in Part C below.

B. Check the type of treatment facility that is employed:

Factor

X	Mechanical Treatment Plant (Trickling filter, activated sludge, etc.)	2.5
	Specify Type	
D	Aerated Lagoon	2.0
	Stabilization Pond	1.5
	Other (Specify)	1.0

C. Multiply the factor listed next to the type of facility your community employs by the age of your facility to determine the total point value of Part 3:



Also enter this value or 50, which ever is less, on the point calculation table on page 16.

D. Please attach a schematic of the treatment plant.

Facility Name LA0036421 CENTRAL PLANT

PAR	8Т 4:	OVERFLOWS AND BYPASSES
Α.	(1)	List the number of times in the last year there was an overflow, bypass, or unpermitted discharge of untreated or incompletely treated wastewater due to heavy rain:
	(2)	List the number of bypasses, overflows, or unpermitted discharges shown in A (1) that were within the collection system and the number at the treatment plant.
		Collection System 0 Treatment Plant 0
В.	(1)	List the number of times in the last year there was a bypass or overflow of untreated or incompletely treated wastewater due to equipment failure, either at the treatment plant or due to pumping problems in the collection system: $24$ (Circle One) $0 = 0$ points $1 = 5$ points $2 = 10$ points 3 = 15 points $4 = 30$ points or more = 50 points
	(2)	List the number of bypasses or overflows shown in B (1) that were within the collection system and the number at the treatment plant.
		Collection System 24 Treatment Plant 0
C.	Specify	y whether the bypasses came from the city or village sewer system or from contract or tributary unities/sanitary districts, etc.
D.	Add th	e point values circled for A and B and place the total in the box below.
		TOTAL POINT VALUE FOR PART 4 50 (max=100)
		Also enter this value on the point calculation table on page 16.
E.	List the Federa	e person responsible for reporting overflows, bypasses, or unpermitted discharges to State and 1 authorities:
	WARF (225	REN BRANDON, ASSISTANT WASTEWATER LABORATORY SUPERVISOR 5) 389-3240
	Descril	be the procedure for gathering, compiling, and reporting:
	THE	PROCEDURE FOR GATHERING, COMPILING AND REPORTING IS SPECIFIED
		· · · · ·

8

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a.

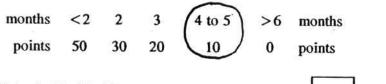
Facility Name

### PART 5: SLUDGE STORAGE AND DISPOSAL SITES

A. Sludge Storage

How many months of sludge storage capacity does your wastewater treatment facility have available, either on-site or off-site?

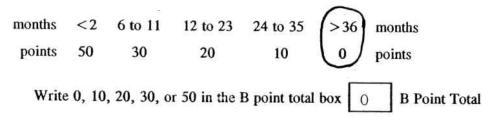
Circle the number of months and corresponding point total. Write the point total in the box below at the right.



Write 0, 10, 20, 30, or 50 in the A point total box 10 A Point Total

B. For how many months does your facility have access to (and approval for) sufficient land disposal sites to provide proper land disposal?

Circle the number of months and corresponding point total. Write the point total in the box below at the right.



C. Add together the A and B point values and place this sum in the box below at the right:

TOTAL POINT VALUE FOR PART 5 10 (max=100)

Also enter this value on the point calculation table on page 16.

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Facility Name

LA0036421 CENTRAL PLANT

T 6: NEW DEVELO	<b>)PMENT</b>		
Please provide the following during the last year.	information for the total	of all sewer line extensions which were in	stalled
Design Population:	800	5	
Design Flow:	0.08	MGD	
Design BOD <sub>5</sub> :	190	mg/l	
Has an industry (or other dev year, such that either flow or or greater)? (Circle One)	pollutant loadings to the	the community or expanded production in the sewerage system were significantly increases. Yes = 15 points	e past sed (5
Describe:			
List any new pollutants:			
List any new pollutants:	lustrial, commercial, or	residential) anticipated in the next 2-3 years system could significantly increase?	
List any new pollutants: Is there any development (ind that either flow or pollutant le (Circle One)	lustrial, commercial, or oadings to the sewerage	residential) anticipated in the next 2-3 years system could significantly increase?	
List any new pollutants: Is there any development (ind that either flow or pollutant le (Circle One) Describe:	fustrial, commercial, or oadings to the sewerage $N_0 = 0$ point	residential) anticipated in the next 2-3 years system could significantly increase? Yes = 15 points	s, such
List any new pollutants: Is there any development (ind that either flow or pollutant le (Circle One) Describe: List any new pollutants that y	fustrial, commercial, or oadings to the sewerage No = 0 point rou anticipate:	residential) anticipated in the next 2-3 years system could significantly increase? Yes = 15 points	s, such
List any new pollutants: Is there any development (ind that either flow or pollutant le (Circle One) Describe: List any new pollutants that y Add together the point value	fustrial, commercial, or oadings to the sewerage No = 0 point rou anticipate:	residential) anticipated in the next 2-3 years system could significantly increase? Yes = 15 points place the sum in the blank below.	s, suct
List any new pollutants: Is there any development (ind that either flow or pollutant le (Circle One) Describe: List any new pollutants that y Add together the point value	Instrial, commercial, or oadings to the sewerage No = 0 point rou anticipate: circled in B and C and p FOTAL POINT VALU	residential) anticipated in the next 2-3 years system could significantly increase? Yes = 15 points place the sum in the blank below.	s, suct
List any new pollutants: Is there any development (ind that either flow or pollutant le (Circle One) Describe: List any new pollutants that y Add together the point value	Instrial, commercial, or oadings to the sewerage No = 0 point rou anticipate: circled in B and C and p FOTAL POINT VALU	residential) anticipated in the next 2-3 years system could significantly increase? Yes = 15 points place the sum in the blank below. E FOR PART 6 0 (max=30)	s, suct

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Facility Name LA0036421 CENTRAL PLANT

PAR	T 7: OPERATOR CERTIFICATION AND EDUCATION
Α.	What was the name of the operator-in-charge for the reporting year?
B.	What is his/her certification number? #10-549 Cert. #
C.	What level of certification is the operator-in-charge required to have to operate the wastewater treatment plant? Wastewater Trmt. IV Level Required
D.	What is the level of certification of the operator-in-charge? Wastewater Trmt. IV Level Certified
E.	Was the operator-in-charge of the report year certified at least at the grade level required in order to operate this plant? $\checkmark$ Check one box $\boxtimes$ yes = 0 points $\square$ no = 50 points
	Write 0 or 50 in the E point total box $\begin{bmatrix} 0 \\ \end{bmatrix}$ E Point Total
F.	Has the operator-in-charge maintained recertification requirements during the reporting year? ✓ Check one box 🖄 yes 🗆 no
G.	How many hours of continuing education has the operator-in-charge completed over the last two calendar years? $\checkmark$ Check one box $\boxtimes$ 12 hours or more = 0 points $\square$ Less than 12 hours = 50 points
	Write 0 or 50 in the G point total box 0 G Point Total
H.	Is there a written policy regarding continuing education and training for wastewater treatment plant employees? $\checkmark$ Check one box $\boxtimes$ yes $\Box$ no
	Explain:
	The State of Louisiana requires that an operator have at least 16 hours of continuing education in a two-year period to maintain his/her certification.
<b>I</b> .	What percentage of the continuing education expenses of the operator-in-charge were paid for:
*	By the permittee? 100%
	By the operator? 0%
J.	Add together the E and G point values and place this sum in the box below at the right:
	TOTAL POINT VALUE FOR PART 7 0 (max=100)

Also enter this value on the point calculation table on page 16.

Facility Name

LA0036421 CENTRAL PLANT

# PART 8: FINANCIAL STATUS

Α.

Are User-Charge Revenues sufficient to cover operation and maintenance expenses?

□ Yes □ No If no, how are O & M costs being financed? Explain:

SAME AS B.

What financial resources do you have available to pay for your wastewater improvements and В.

WASTEWATER IMPROVEMENTS AND RECONSTRUCTION NEEDS ARE FUNDED FROM FOUR MAIN REVENUE SOURCES. THEY ARE A ONE HALF PERCENT SALES & USE TAX, SEWER USER FEES, SEWER IMPACT FEED, AND A \$4 MILLION SUBSIDY FROM THE GENERAL FUND SUPPORTED FROM GAMING REVENUES.

LA0036421 CENTRAL PLANT

### PART 9: SUBJECTIVE EVALUATION

- Α. Collection System Maintenance
  - Describe what sewer system maintenance work has been done in the last year. 1.

SEE ATTACHMENT

Describe what lift station work has been done in the last year. 2.

SEE ATTACH MENT

3. What collection system improvements does the community have under consideration for the next 5 years?

SEE ATTACHMENT

- B. If you have ponds, please answer the following questions:
  - 1. Do you have duckweed buildup in your ponds?
  - 2. Do you mow your dikes regularly (at least monthly), to the waters edge?
  - 3. Do you have bushes or trees growing on the dikes or in the ponds?
  - 4. Do you have excess sludge buildup (>1 foot) on the bottom of any of your ponds? □ Yes □ No
  - 5. Do you exercise all of your valves?
  - 6. Are your control manholes in good structural shape?
  - 7. Do you maintain at least three feet of freeboard in all your ponds?
  - 8. Do you visit your pond system, at least weekly?

□ Yes □ No

#### LA0036421 CENTRAL PLANT

### LA MWPP Environmental Audit

#### Part 9: Subjective Evaluation

**A1**. As part of the Consent Decree, Operation and Maintenance of the Central Treatment Plant Collection Area is performed and reported on a quarterly basis. The following table is a breakdown/summary of activities performed within the Central Treatment Plant Collection System Area during the reporting period.

#### Central Treatment Area Monitoring Period (9/06 – 8/07)

Line Cleaning	5%
CCTV Inspections	1%
Smoke Testing	2%
Dye Testing	0%
Manhole Inspection	2%
Line Repaired	8%
Manhole Rehabilitation	0%
Force Main-Inspections	14%
Repaired	20%
Air Release Valves-Inspections	61%
Repaired	3%
Wet Well Cleaned	548%
Pump Stations-Repaired	14%

A3. During the next 5 years approximately 6 projects in the Central Treatment Plant Collection Area (related to the SSO Consent Decree Program) are scheduled to be implemented, either design or begin construction. The projects will include pump station upgrades, and force main and gravity sewer improvements. This list is currently being reviewed and revised by our SSO Program Manger, CH2M Hill. Additionally, annual contracts for sewer rehabilitation including lining, point repair, upsizing, and other rehabilitation methods will also be implemented. Following of a listing of the currently proposed projects.

### **Proposed Capital Improvement Plan**

As of September 2007, the recommended program strategy is to conduct comprehensive rehabilitation of the sewer system in all areas where the rainfall dependent infiltration and inflow (RDII) rate currently exceeds 10 percent of the rainfall volume (i.e., the system R value exceeds 10 percent). This will result in significant reductions in wet-weather flows throughout the City/Parish system, thus improving system performance and controlling system overflows and house back-ups. In addition, the comprehensive rehabilitation program will provide substantial additional benefits in terms of reduced operation and maintenance costs as well as improved structural integrity.

The recommended improvements program includes three categories of improvements. The rehabilitation in each of the basins with R-values in excess of 10 percent is considered part of the Category 1 improvements, which also includes minor pump station modifications needed to boost their pumping head (i.e., new impellors, larger motors, piping modifications).

Sewer and pump station improvement plans were devised to resolve all remaining conveyance deficiencies in each basin. The pump station and conveyance system improvements include capacity increases to the stations and piping. The pump station and conveyance system improvements are referred to as Category 2 improvements. Improvements to provide flow equalization and wastewater treatment enhancements are referred to as Category 3.

### **Category 1: Comprehensive Sewer Basin Rehabilitation and Pump Station Upgrades**

Based upon sewer system model results and flow monitoring, numerous basins within the Baton Rouge system require comprehensive rehabilitation. The basins identified through the system model are scheduled for rehabilitation based upon the modeled R-values. The first group of basins scheduled for rehabilitation is those with the highest existing R-values. The Central area R-values indicate the sewer lines in this area are generally in worse condition than other areas of the City's system. A greater portion of the Central system requires rehabilitation than other systems, likely due to the age of the system and service connections. Cross-connections may also be more likely in the older, congested area.

Category 1 also provides for pump station inspection and mechanical improvements at select pump station to allow for head increase. These improvements include assessing and potentially making mechanical upgrades 3 pump stations in the Central CSD area. The assessment of the pump stations will determine specific improvements required to allow each pump station to operate against the system head. Improvements may include replacement of impellers, motors, pumps, and/or piping and will be determined for each station during design.

### **Category 2: Pump Station and Transmission/Conveyance System Improvements**

The system model was used to identify pump stations and conveyance lines where capacity is not adequate for the peak wastewater flows. Category 2 provides for pump station and conveyance system upgrades in capacity. The projects are generally discussed below.

In the Central CSD area, capacity upgrades are required at three pump stations. The largest upgrade required based upon model results is at Pump Station 2. This pump station will require a

capacity increase of approximately 17 MGD. Improvements to obtain this increased capacity will be determined during design.

Pipeline capacity improvements include replacement of approximately 22,000 LF of replacement gravity sewer and installation of approximately 38,000 LF of new parallel gravity sewer. Based upon model results, no new force main based upon capacity needs is required in this service area. A detailed listing of the pump station and pipelines requiring capacity increases are as follows:

- Make capacity upgrade to PS2
- Parallel approximately 13,000 LF gravity sewer and replace approximately 9,000 LF of gravity sewer
- Make capacity upgrade to PS4.
- Assess and make possible mechanical upgrades to PS5, PS15, and PS19
- Replace approximately 8,000 LF of gravity sewer and parallel approximately 17,000 LF of gravity sewer.
- Make capacity upgrade to PS 10

### **Category 3: Flow Equalization and Wastewater Treatment Improvements**

The conveyance improvements described in the previous sections will decrease peak flows to the Central Wastewater Treatment Plant (WWTP). The peak flows predicted by the model for the Central WWTP is slightly less than the plant's current peak treatment capacities.

Sewer rehabilitation will actually decrease dry weather flows in the basins because infiltration of groundwater will be reduced. No redirection of flows from one treatment plant service area to another was found to be beneficial during the development of the program.

Therefore, no wastewater treatment improvements are necessary is the Central CSD area.

C. Treatment Plants

1.

Have the influent and effluent flow meters been calibrated in the last year?  $\square$  Yes  $\square$  No

 Influent flow meter calibration dates(s):
 Effluent flow meter calibration date(s):

 12/15/06
 06/19/07
 02/16/07
 07/18/07

2. What problems, if any, have been experienced over the last year that have threatened treatment?

NONE

3. Is your community presently involved in formal planning for treatment facility upgrading?

 $\Box$  Yes  $\Box$  No If yes, describe:

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Facility Name LA0036421

#### D. Preventive Maintenance

1. Does your plant have a written plan for preventive maintenance on major equipment items?

#### $\boxtimes$ Yes $\square$ No If yes, describe:

Weekly, monthly and semi-annual preventive maintenance sheets that reflect type and frequency as specified in the O&M manuals. A new computer program will manage the maintenance and preventive maintenance of plant equipment and spare parts.

### E. Sewer Use Ordinance

- 1. Does your community have a sewer use ordinance that limits or prohibits the discharge of excessive conventional pollutants (BOD, TSS, or pH) or toxic substances to the sewer from industries, commercial users, and residences?
  - ☑ Yes □ No If yes, describe:

Sewer User Fee Ordinance (No. 7853) limits the discharge of BOD & TSS to 200 mg/l and 250 mg/l respectively. Any discharge above these limits is surcharged at a rate of 2% of the monthly sewer user fee for each limit of 10 mg/l. Pretreatment Ordinance (No. 9195) limits the discharge of heavy metals, chemicals and toxic substances.

#### 

The Sewer User Fee Ordinance is strictly enforced by City-Parish and self monitoring sampling. The same apply to the Pretreatment Ordinance. Enforce mechanisms include discharge permits, surcharges, letter and notice of violations, administrative orders, water termination and fines.

F. Any additional comments about your treatment plant or collection system? (Attach additional sheet if necessary.)

NO

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### POINT CALCULATION TABLE

Fill in the values from parts 1 through 7 in the columns below. Add the numbers in the left column to determine the point total that the wastewater system has generated for the previous year.

Actual Values	Actual Values	Maximum
Part 1: Influent Flow/Loadings	0	80 Points
Part 2: Effluent Quality/Plant Performance	5	100 Points
Part 3: Age of WWTT	22.5	50 Points
Part 4: Overflows and Bypasses	50	100 Points
Part 5: Ultimate Disposition of Sludge	10	100 Points
Part 6: New Development	0	30 Points
Part 7: Operator Certification Training	0	100 Points

TOTAL POINTS

87.5

### **ATTACHMENT 3**

### SAMPLE MWPP RESOLUTION

 Resolved that the city/town of
 BATON ROUGE
 informs Louisiana Department of

 Environmental Quality that the following actions were taken by the
 CITY/PARISH

 METROPOLITAN COUNCIL
 (governing body).

- 1. Reviewed the Municipal Water Pollution Prevention Environmental Audit Report which is attached to this resolution.
- 2. Set forth the following actions necessary to maintain permit requirements contained in the Louisiana Water Discharge Permit System (LWDPS) number LA0036421 AI# 4842.

(Please be specific in listing the actions that will be taken to address the problems identified in the audit report.)

a. CURRENTLY, WE ARE OPERATING UNDER A CONCENT DECREE WHICH BECAME EFFECTIVE MARCH 14, 2002.

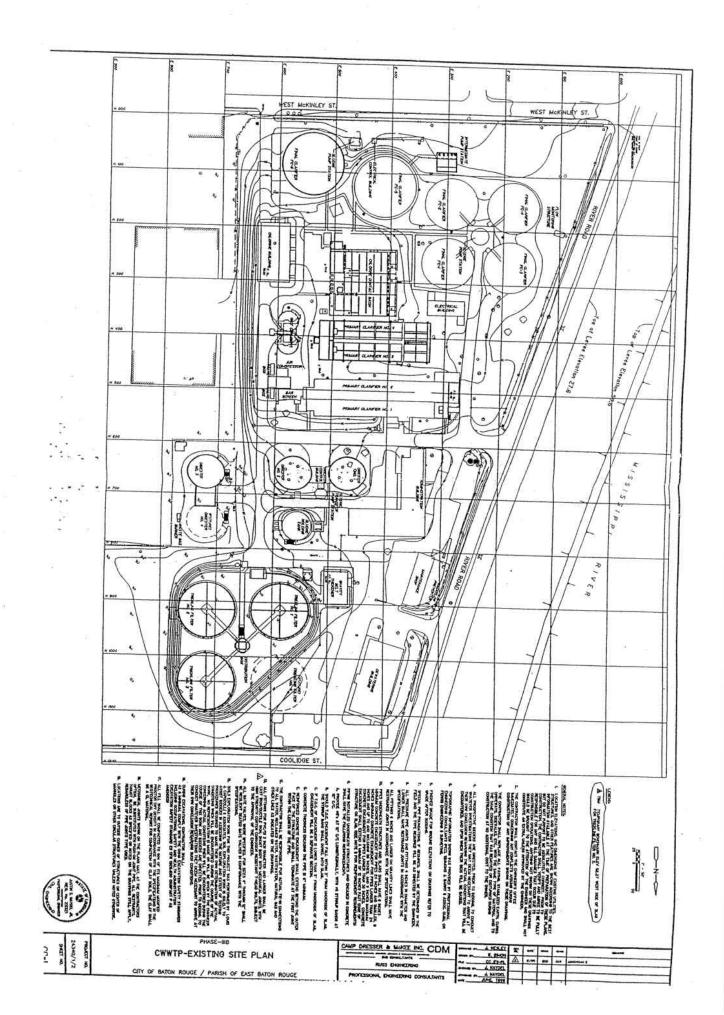
b.

C.

d.

etc.

	majority/unanimous (circle one) vote of the <u>CITY/PARISH METROPOLITAN</u>	
COUNCIL	on000ctober 10, 2007	_(date).
	"¥ea" Messrs. Boneno, Carter, Culbertson, Greco, Kelly, Sharper	
	Skyring, Walker and Mrs. Tassin.	
	"Nay" None.	
	Absent: Messrs. Addison and Ourso and Ms. Burgess	
	arey cosper	
		CLERK



ADOPTED METROPOLITAN COUNCIL

OCT 1 0 2007

RESOLUTION 45782

COUNCIL ADMINISTRATOR TREASURER

REQUESTING APPROVAL FOR SUBMITTAL OF THE LOUISIANA MUNICIPAL WATER PREVENTION POLLUTION (MWPP) ENVIRONMENTAL AUDIT REPORT FOR THE CENTRAL WASTEWATER TREATMENT PLANT TO THE DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) FOR THE MONITORING PERIOD OF SEPTEMBER 1, 2006 THROUGH AUGUST 31, 2007.

BE IT RESOLVED by the Metropolitan Council of the Parish of East Baton Rouge and City of Baton Rouge that the submittal of the Louisiana Municipal Water Pollution Prevention (MWPP) Environmental Audit Report for the Central Wastewater Treatment Plant to the Department of Environmental Quality (DEQ) for the monitoring period of September 1, 2006 through August 31, 2007, is hereby approved.

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