

## Region 6 Compliance Assurance and Enforcement Division

### INSPECTION REPORT

|                                        |                                                                                                                                                                |               |              |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|
| Inspection Date(s):                    | 04/11/2024                                                                                                                                                     |               |              |
| Media:                                 | Water                                                                                                                                                          |               |              |
| Regulatory Program(s)                  | Clean Water Act                                                                                                                                                |               |              |
| Company Name:                          | Louisiana Sugar Refining, LLC, Gramercy Refinery                                                                                                               |               |              |
| Facility Name:                         | Louisiana Sugar Refining, LLC, Gramercy Refinery                                                                                                               |               |              |
| Facility Physical Location:            | 1230 Fifth Ave                                                                                                                                                 |               |              |
| (city, state, zip code)                | Gramercy, LA 70052                                                                                                                                             |               |              |
| Mailing address:                       | P.O. Box 625                                                                                                                                                   |               |              |
| (city, state, zip code)                | Gramercy, LA 70052-0625                                                                                                                                        |               |              |
| County/Parish:                         | St. James Parish                                                                                                                                               |               |              |
| Facility Contact:                      | Phillip Valentine                                                                                                                                              | Plant Manager |              |
|                                        | 225-869-6614                                                                                                                                                   |               |              |
| FRS Number:                            |                                                                                                                                                                |               |              |
| Identification/Permit Number:          | LA0000604                                                                                                                                                      |               |              |
| Media Number:                          | AI#1276                                                                                                                                                        |               |              |
| NAICS:                                 | 311312                                                                                                                                                         |               |              |
| SIC:                                   | 2062                                                                                                                                                           |               |              |
| Personnel participating in inspection: |                                                                                                                                                                |               |              |
| Michael Williams                       | EPA/ 6EN-WMH                                                                                                                                                   | Inspector     | 281-983-2150 |
| David Owusu                            | LDEQ                                                                                                                                                           | Inspector     | 504-736-7701 |
| Jerod Goudy                            | LDEQ                                                                                                                                                           | Inspector     | 504-736-7701 |
| Ridge Bourgeois                        | LSR                                                                                                                                                            | Maintenance   | 225-869-6690 |
| Phillip Valentine                      | LSR                                                                                                                                                            | Plant Manager | 225-869-6614 |
|                                        |                                                                                                                                                                |               |              |
|                                        |                                                                                                                                                                |               |              |
|                                        |                                                                                                                                                                |               |              |
| EPA Lead Inspector<br>Signature/Date   | <br>Digitally signed by Williams, Mike<br>Date: 2024.06.24 16:17:39 -05'00' |               | Date         |
|                                        | Michael D. Williams                                                                                                                                            |               |              |
| Supervisor<br>Signature/Date           | <b>ROBERTO BERNIER</b><br>Digitally signed by ROBERTO BERNIER<br>Date: 2024.06.17 10:25:09 -05'00'                                                             |               | Date         |
|                                        | Roberto Bernier                                                                                                                                                |               |              |

## Section I - Introduction

### PURPOSE OF THE INSPECTION

EPA Region 6 inspector, Michael Williams, arrived at the Louisiana Sugar Refining, LLC (LSR) at 10:50 am on April 11, 2024, for an unannounced NPDES wastewater treatment plant inspection. During the opening conference, I met with Phillip Valentine, Plant Manager. Mr. Valentine was informed that this was an EPA lead compliance evaluation inspection to determine compliance with the facility's National Pollutant Discharge Elimination System (NPDES) permit and the Clean Water Act. The scope of the inspection was with permit LA0000604 and facility operations and maintenance under the Clean Water Act. The inspection was conducted under the authority of the NPDES permit program, in accordance with the Federal CWA.

The information presented in this report is based on the materials and information supplied by Louisiana Sugar Refining, LLC representatives, observations made during the inspection and records, or reports maintained by the permittee.

### FACILITY DESCRIPTION

The facility, a crystalline cane sugar refinery, has been in operation since 1895 under various owners, currently operated by LSR since 2011. Initially known as Gramercy Sugar Company, it has seen multiple expansions and upgrades, including the construction of a new refinery in 2013.

LSR's refinery processes raw sugar cane into refined sugar and molasses, with a production capacity of 3,450 tons of sugar melt per day. Raw sugar is delivered by truck, stored in warehouses, and transported through machinery and conveyors for processing. The refining process includes four main steps:

1. Melting: Sugar crystals are dissolved in water.
2. Clarification: Processing aids remove insoluble materials.
3. Decolorization: Soluble color components are removed.
4. Crystallization: The purified liquid is turned back into crystals using vacuum boiling and drying/conditioning.

The crystallized sugar is separated from syrup using centrifugal machines, washed, dried, and conveyed to rotary dryers. Finally, the sugar is screened, packaged, and loaded for distribution by truck, railcar, or van.

### *Wastewater*

LSR generates wastewater during crystalline sugar and molasses production. LSR recovers and recycles process streams to reduce wastewater loading and flow to the WWTS, which treats and discharges wastewater through Outfalls 001A-E.

All wastewater from the refinery is treated in a pond-based system involving solids settling and aeration. Some process wastewaters undergo additional solid capture using a belt press. LSR uses various chemicals for neutralization, separation, decolorization, disinfection, algae control, and prevention of scaling, biofouling, or corrosion.

Solids from water treatment, clarification, and process wastewaters are sent to drying/dewatering ponds before beneficial use or offsite disposal. Decanted water from this process returns to the WWTS for treatment and discharge through Outfalls 001A-E.

Sanitary wastewater is treated on-site in an activated sludge package plant with a capacity of 30,000 GPD, undergoing aeration, biological treatment, settling, and chlorination. Treated sanitary wastewater is monitored at Internal Outfall 101 before mixing with other wastewaters and discharging through Outfalls 001A-E.

## **Section II- Observations**

This inspection revealed the following observations:

Louisiana Sugar Refining, LLC has recently had several Total Suspended Solids (TSS) exceedances of their permit limit from November 2023 to February 2024. LSR provided an outline of initiated and proposed corrective measures to be taken (See Appendix A). The increase levels of TSS can be associated with the reduction of capacity and decrease in residual time needed to settle out suspended solids in a lagoon system.

## **Section III- Areas of Concerns**

This inspection revealed the following areas of concerns:

- The restoration of the lagoon system to the design specification is needed to minimize TSS exceedance. Periodic maintenance program should be established to ensure capacity is available and prevent any short circuiting of the treatment system.
- Pace Analytical Services is required to select the sample with the highest dissolved oxygen (DO) concentration, when all dilutions result in a residual of less than 1mg/L after 5 days. Pace standard operating procedures (SOP) states it is selecting the greatest dilution to collect the BOD for samples with less than 1mg/L. The greatest dilution generally will produce the DO concentration but not always (See Appendix C).
- Pace Analytical arbitrarily selects what is reportable for diluted samples that result in a depletion less than 2mg/L after 5 days of initial reading of dissolved oxygen as stated in their SOP. When all dilutions for a sample result in less than 2mg/L, they are required to select the largest volume of sample and calculate the result. If the sample greatest volume used was less than 50mL, Pace is reporting non detect (See Appendix C).
- No follow-up reports explaining issues noted when samples did not meet quality control conditions.

## **Section IV – LIST OF APPENDICES**

- Appendix A - LSR Summary of Actions
- Appendix B - Photos
- Appendix C - Pace SOP