

MWD\_WQ0010134008\_CO\_20170525\_Final Report  
**Texas Commission on Environmental Quality**  
**Investigation Report**

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**Customer: City of Pearland**  
**Customer Number: CN600595052**

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**Regulated Entity Name: CITY OF PEARLAND**  
**Regulated Entity Number: RN101920007**

**Investigation #** 1416272

**Incident Numbers**

258611

**Investigator:** ISAAH LONGORIA

**Site Classification** DOMESTIC MAJOR

**Conducted:** 05/25/2017 -- 05/25/2017

**SIC Code:** 4952

**NAIC Code:** 221320

**Program(s):** WASTEWATER

**Investigation Type:** Compliance Investigation

**Location:** LOCATED APPROX 1000 FT N OF  
MCHARD RD APPROX 1.25 MI W OF THE INTERX  
OF MCHARD RD AND SH 288 IN BRAZORIA  
COUNTY

**Additional ID(s):** TX0117501  
WQ0010134008

**Address:** ,  
, ,

**Local Unit:** REGION 12 - HOUSTON

**Activity Type(s):** WWLSTMAJFC - Lift Station  
Maintenance/Major Focused  
WWCMPL - WW Complaint

**Principal(s):**

<b>Role</b>	<b>Name</b>
RESPONDENT	CITY OF PEARLAND

**Contact(s):**

<b>Role</b>	<b>Title</b>	<b>Name</b>	<b>Phone</b>
REGULATED ENTITY MAIL CONTACT	MAYOR	HON TOM REED	Work (281) 652-1600
PARTICIPATED IN	WASTEWATER TREATMENT SUPERINTENDENT	MR MARK WAHLSTROM	Work (281) 652-1778 Cell (713) 775-4082

**Other Staff Member(s):**

<b>Role</b>	<b>Name</b>
QA Reviewer	NICHOLE NUNES
Investigator	NICHOLE NUNES
Supervisor	WESTIN MASSEY
Investigator	DUSTIN ROBERTS

### Associated Check List

<u>Checklist Name</u>	<u>Unit Name</u>
WQ COMPLAINT INVESTIGATION	COMPL
WQ FOCUSED INVESTIGATION - INTERIM - LIFT STATION - revised 10/17/2011	LIFT STATION

#### Investigation Comments:

##### INTRODUCTION:

On May 22, 2017, the Texas Commission on Environmental Quality (TCEQ) Houston Region Office Water Section received an anonymous complaint, (Consolidated Compliance and Enforcement Data System (CCEDS) Incident No. 258611), alleging a sewage smell.

A Water Quality Complaint investigation was conducted at the Reflection Bay Water Reclamation Facility (City of Pearland) on May 25, 2017 by Ms. Nichole Batista Nunes, Mr. Isaiah Longoria, and Mr. Dustin Roberts, Environmental Investigators with the TCEQ Houston Region Office. The investigation was conducted as a result of a complaint; therefore, no notification of the investigation was given. The allegation of the complaint was not confirmed at the time of the investigation. A complaint letter was not transmitted to the complainant, due to the anonymity of the complainant.

##### BACKGROUND

The TCEQ Houston Region Office files were reviewed and a TCEQ database search was conducted pursuant to this investigation. The previous compliance investigation (CCEDS Investigation Number 1388611) was conducted on January 25, 2017. One alleged violation was cited for the unauthorized discharge of untreated wastewater, and was subsequently resolved on January 25, 2017. An Additional Issue was also cited during the investigation.

##### GENERAL FACILITY AND PROCESS INFORMATION

The City of Pearland's Reflection Bay Water Reclamation Facility (WRF) operates two plants in parallel. An activated sludge facility that is operated in the sequential batch reactor (SBR) mode and an emergency package plant operated in the conventional mode. The facility is permitted to discharge 3.0 million gallons per day (MGD). The major treatment units for the SBR consists of four aeration basins, two clothe media filters, two digester basins, and a sludge belt press. The major treatment units for the package plant consists of eight aeration basins, four clarifiers and one clothe media filters. The sludge is pumped to the SBR digester. Effluents from both plants comingle before disinfection at the ultra violet (UV) light system prior to discharge. The collection system includes one onsite lift station and five offsite lift stations.

There is active construction going on at the facility for significant plant modifications and upgrades. The improvement includes four new SBR units, conversion of the original four SBR units to two units, two new sludge belt presses, new disc filter systems, new head works, new chlorinated non-potable water system, new lift station and rehabilitation of the existing lift station under a roof, new blower building for the SBR, and installation of new UV equipment in the existing UV channel.

##### SITE INVESTIGATION

On May 25, 2017, a site investigation was conducted by Ms. Batista Nunes, Mr. Longoria, and Mr. Roberts. The investigators arrived at the Reflection Bay WRF and investigated the area for any objectionable odors. The investigators began an odor survey (Supplemental Investigator's Odor Intensity Time Log—Attachment 1) at approximately 01:10 PM at Location 1 on the Aerial Map (Attachment 2) for fifteen minutes; the wind direction was documented at South-Southwest (downwind of the facility) at approximately 7 miles per hour (mph), the ambient temperature was approximately 81 degrees Fahrenheit; weather conditions were based on WeatherBug.com data. After fifteen minutes, no unusual or objectionable odors were detected.

At the conclusion of the fifteen minute odor survey, the investigators went on-site at the facility and performed a brief walk through and inspection of the plant. The treatment units appeared to be operating properly.

A deodorizing unit was observed at the onsite lift station that was connected to a misting system that surrounded the lift station and SBR units.

Immediately after inspection of the plant, the investigators met with Mr. Mark Wahlstrom, Wastewater Treatment Superintendent with the City of Pearland. Mr. Wahlstrom allowed access to the off-site lift station located approximately 136 yards south of the intersection of Eagle Cove Drive and Biscayne Bay Drive, Pearland, Texas

77584. The investigators performed a lift station focused investigation to determine compliance with regulations. The lift station was observed to be in compliance with applicable regulations. The lift station is also fitted with a deodorizing unit that has two types of carbon filters to try to help abate objectionable odors.

CONCLUSION

The complainant alleged a sewage smell coming from the City of Pearland Reflection Bay Water Reclamation Facility that affects the Shadow Creek Ranch area. No unusual or objectionable odor was detected during the investigation; therefore, the complaint was unconfirmed.

SUMMARY OF INVESTIGATION FINDINGS

**No Violations Associated to this Investigation**

Signed   
Environmental Investigator

Date 6/23/17

Signed   
Supervisor

Date 6/26/17

**Attachments: (in order of final report submittal)**

- Enforcement Action Request (EAR)
- Letter to Facility (specify type) : No Action
- Investigation Report
- Sample Analysis Results
- Manifests
- Notice of Registration

- Maps, Plans, Sketches
- Photographs
- Correspondence from the facility
- Other (specify) :  
See listing Attachments



**City of Pearland Reflection Bay Water Reclamation Facility  
1818 Reflection Bay Drive, Pearland, Texas 77584  
RN101920007  
Investigation No. 1416272  
Incident No. 258611  
Complaint Investigation**

**LIST OF ATTACHMENTS**

1. Supplemental Investigator's Odor Intensity Time Log
2. Aerial Map



# Attachment 1





# Supplemental Investigator's Odor Intensity Time Log

Date of Investigation: 5/25 Start Time: 1:10 @ outfall (downwind)

Minutes	Odor Intensity VL, L, M, S, VS
1 min	ND
2	"
3	"
4	"
5	"
6	"
7	"
8	"
9	"
10	"
11	"
12	"
13	"
14	"
15	"
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	

Minutes	Odor Intensity VL, L, M, S, VS
31 min	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
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60	

Offensiveness: Highly \_\_\_\_\_ Offensive \_\_\_\_\_ Unpleasant \_\_\_\_\_ Not Unpleasant \_\_\_\_\_

Weighted Average Intensity:

	VS	S	M	L	VL	No Odor
1 Min						
10 Min						
1 Hour						

winds SSW about 7mph; gusts @ about 11



## Attachment 2



# Aerial Map

City of Pearland Reflection Bay Water Reclamation Facility

# Legend



DEPARTMENT OF THE ARMY  
ENGINEER REGIMENT

10000000

Bryan W. Shaw, Ph.D., P.E., *Chairman*  
Toby Baker, *Commissioner*  
Jon Niermann, *Commissioner*  
Richard A. Hyde, P.E., *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

June 26, 2017

Tom Reed, Mayor  
City of Pearland  
3519 Liberty Drive  
Pearland, Texas 77581-5416

Re: Investigation Request at:  
City of Pearland Reflection Bay Water Reclamation Facility located at 1818 Reflection Bay Drive, Pearland (Brazoria County), Texas 77548  
TCEQ ID No.: WQ0010134008, EPA ID No.: TX0117501  
Investigation No.: 1416272  
Incident No(s): 258611

Dear Mayor Reed:

The Texas Commission on Environmental Quality (TCEQ) Houston Region Office received on May 22, 2017 a request for assistance regarding the sewage smell at the above-referenced facility. In response to this request, Mr. Isaiah Longoria, Ms. Nichole Batista Nunes, and Mr. Dustin Roberts of this office conducted an investigation on May 25, 2017. No violations are being alleged as a result of the investigation.

For more information about our complaint process, you may access the publication GI-278: Do You Want to Make an Environmental Complaint? Do You Have Information or Evidence? on our website at [www.tceq.texas.gov](http://www.tceq.texas.gov).

We appreciate your assistance in this matter and your interest in protecting the quality of our environment. If you have any questions concerning these findings, or if we can be of further assistance, please contact Mr. Isaiah Longoria at this office 713-767-3698.

Sincerely,

A handwritten signature in blue ink, appearing to read "Westin Massey".

Westin Massey, Team Leader  
Water Section  
Houston Region Office  
WM/IL/JM

