

AIR CP\_101618882\_CP\_20160802\_INVESTIGATION\_1350281\_  
**Texas Commission on Environmental Quality**  
**Investigation Report**

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**Customer: Nalco Company LLC**  
**Customer Number: CN602898751**

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**Regulated Entity Name: NALCO FRESNO FACILITY**

**Regulated Entity Number: RN101618882**

**Investigation #** 1350281

**Incident Numbers**

239662

**Investigator:** REGINA RHODA

**Site Classification** MAJOR SOURCE

**Conducted:** 08/02/2016 -- 08/02/2016

**NAIC Code:** 325199

**SIC Code:** 2869

**Program(s):** AIR NEW SOURCE PERMITS

**Investigation Type:** Compliance Investigation

**Location:**

**Additional ID(s):** 4005  
FG0053G

**Address:** 3130 FM 521 RD,  
FRESNO, TX , 77545

**Local Unit:** REGION 12 - HOUSTON

**Activity Type(s):** AIRCOMPL - AIR CMPL - AIR  
COMPLAINT INV  
AIR MNSR - MINOR SOURCE NEW  
SOURCE REVIEW

**Principal(s):**

Role	Name
RESPONDENT	NALCO COMPANY LLC

**Contact(s):**

Role	Title	Name	Phone
REGULATED ENTITY CONTACT	SH&E SUPERINTENDENT	MR BRUCE MCFARLAND	Fax (281) 431-3665 Work (281) 710-9357 Cell (832) 794-0648
REGULATED ENTITY MAIL CONTACT	PLANT MANAGER	MR CHRIS BOYD	Work (281) 431-2561

**Other Staff Member(s):**

Role	Name
Investigator	TRICIA LESTARJETTE
Supervisor	LETASHA MILLER
Investigator	CASSANDRA MOORE
QA Reviewer	LETASHA MILLER

### Associated Check List

Checklist Name

AIR COMPLAINT INVESTIGATION

AIR INVESTIGATION - EQUIPMENT

MONITORING AND SAMPLING revised 06/2013

Unit Name

site wide

site wide

Investigation Comments:

INTRODUCTION

Introduction

On July 22, 2016 through August 4, 2016, the Texas Commission on Environmental Quality (TCEQ) received 55 complaints from 31 complainants (complaint incident no 239662) via email and phone. The complainants alleged recurring incidents of foul odors that were described as strong garbage, a bad chemical, an odor of rotten eggs and sewage, cow manure mixed with natural gas, and feces. The complainants alleged that the smells permeate the houses but are stronger outside the houses, mostly at night, between the hours of 11:00 pm and 7:00 am. diminishing after sunrise. The complainants alleged the source to be Blue Ridge Landfill located on FM 521, Pearland. Another alleged source indicated is Nalco Champion located on FM 521, Fresno. Health effects alleged by some complainants are nausea, headaches, stinging in nose and eyes, and/or sore throats during these episodes. The complainants also alleged of not being able to go outside because the smell is so bad.

The meteorological conditions during the incident on July 22, 2016 at 5:00 a.m. was about 78 degrees Fahrenheit (F) with calm or no wind and no precipitation as documented by Weather Underground for KLVJ. The temperature on July 23-30, 2016 at 5:00 a.m. was 75-82 degrees F with calm or no wind. Rain and thunderstorms occurred most afternoons on July 26-28, 2016.

Several complainants were contacted on July 26, 2016 before noon, prior to the investigation. They confirmed the information initially reported. The complainants also stated that odors have been happening intermittently for several months.

Investigation Narrative

On August 4, 2016, Ms. Regina Rhoda, Ms. Cassandra Moore and Ms. Trisha Lestarjette of the Texas Commission on Environmental Quality (TCEQ) Houston Region Office conducted an odor survey in the Shadow Creek Ranch Subdivision, in Pearland, and in Fort Bend, Brazoria, and Harris counties surrounding the vicinity of Shadow Creek Ranch in response to citizen complaints of odors (see Attachment #1 Area Map). The surrounding land use is a mix of residential, industrial and commercial areas. The terrain is flat with sporadic forest. The temperature was 78.6 degrees Fahrenheit (F) with 93 % humidity and no wind as measured by the Kestrel portable weather monitor, model 4500.

The investigators traveled south on FM 521 from McHard Road at 5:31 a.m. A moderately strong odor of garbage was detected on FM 521 between McHard Road and Broadway but was not persistent.

The investigators surveyed several streets within the Shadow Creek Ranch subdivision. At 5:50 a.m., the investigators detected an odor of sewage next to a drainage canal that crossed under Trinity Bay Drive just north of Shadowmere Drive. The investigators stopped at this area for approximately 10 minutes but the odor was not persistent.

At 6:40 a.m., the investigators recorded a moderately strong garbage smell near the intersection of Longlake Drive and Mountain Sage Drive. This is approximately 2200 feet east of Blue Ridge Landfill. A fifteen minute odor survey was conducted. (See Attachments #2 Survey Route Map and #3 Investigator's Odor Log) The investigators left this area when the odor disappeared at 7:02 a.m. According to the TCEQ Frequency, Intensity, Duration, and Offensiveness (FIDO) chart, the landfill/garbage odor is characterized as offensive. To be considered a nuisance, a strong odor as a single occurrence has to be persistent for 12 hours. The odor experienced by the investigators did not fulfill the requirements for a nuisance.

The investigators drove south on Windward Drive, south of Broadway to an area with new home construction. Here there was a light odor like the smell of a "Port-a-Potty", even though one was not present.

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The investigators drove south on FM 521, south of Broadway at about 7:30 a.m. The smell of a "Port-a-Potty" reappeared. This area had undeveloped land west of the road and the Fort Bend County Parks and Recreation building on the east side. No source was identified.

Ms. Moore used the Optical Gas Imaging Camera (OGIC) to observe some nearby tanks and roof vents/exhaust ports from a building on the east side of FM 521 labeled Fairmount Minerals Black Lab, LLC./Self-Suspending Proppant, LLC. No volatile organic compounds (VOC) were detected.

At 9:00 a.m., the investigators conducted an investigation at Nalco Champion located at 3130 FM 521, Fresno, TX. This included a records review and walk-through of the plant. See the 'Facility Authorization Narrative' section for additional information. No odors were detected at this time. The investigators left the facility at 11:01 a.m.

The investigators arrived at Lone Star Recycling and Disposal Facility, at 4107 South Sam Houston Parkway West, Houston, TX 77053, at 12:35 p.m. A perimeter survey showed no dust leaving the facility and only a slight odor of garbage along Sam Houston Parkway, north of the facility.

### Facility Authorization Narrative

Nalco Company, LLC operates the Fresno Facility (RN 101618882) at 3130 FM 521, Fresno (Fort Bend County), Texas under Federal Operating Permit (FOP) O-03536 and New Source Review (NSR) 4005, effective date February 6, 2012.

Records were reviewed for the following:

NSR 4005 Special Condition (SC) 4: "Each flare system shall be operated with a flame present at all times..."

Records were reviewed for the presence of a flame in Flare 1 (EPN: F-1) and for Flare 2 (EPN: F-2) for July 21, 2016 through August 3, 2016. There were several instances between July 26, 2016 and August 2, 2016 when the DCS indicated no flame. Nalco has indicated connectivity problems with this system and provided other records verifying the presence of the flame. Nalco was in compliance with this condition.

SC 6: The alkalinity of the scrubbing solution. Records were reviewed which show the alkalinity for Plant 1 Scrubber System (EPNs: S1 and S2) was tested weekly during the period July 24, 2016 through August 6, 2016 and met the requirement of alkalinity of the caustic solution above 5 weight percent caustic. Nalco was in compliance with this condition.

SC 7: pH of Scrubbers. Records were reviewed for the period of July 24, 2016 through August 3, 2016 which show that 79S-2A Scrubber maintained a pH of 2-3; 79S-2B Scrubber maintained a pH of 10-12, as required. Nalco was in compliance with this condition.

SC 10A and C: "The CAS shall be sampled and recorded daily to determine breakthrough of volatile organic compounds (VOC)..." Records were reviewed for the carbon adsorption system (CAS) for the period of July 18, 2016 through August 4, 2016 which show sampling was conducted daily with no readings equal to or exceeding 100 part per million by volume (ppmv). Therefore no breakthrough of VOC was indicated. Nalco was in compliance with this condition.

SC 11: "The scrubbing solution in Scrubber S 114 03 shall be maintained at or above a pH of 8..." Records were reviewed for the period of July 22, 2016 through August 3, 2016 which showed the scrubber was maintained at or above a pH of 8 except for a few minutes on July 25, 2016 and August 1, 2016. These periods of lower the 8 pH coincides with scheduled maintenance and calibration of the unit. Nalco was in compliance with this condition.

SC 15: "...The thermal oxidizer firebox exit temperature shall be maintained at not less than 1400 F." Records were reviewed for the period of July 21, 2016 through August 3, 2016 for the firebox exit temperature of the Thermal Oxidizer (EPN:TO-1). Temperatures were not maintained above the minimum of 1400 F on August 1, 2016 from 20:14 to 20:25 (11 minutes). No cause was identified for this discrepancy. For more information, see Violation Tracking Number (VTN) 617448.

### Exit Interview

On September 7, 2016, the investigator conducted an exit interview with Mr. V. Bruce McFarland. An Exit

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Interview Form was completed by the investigator and acknowledged by Mr. McFarland. The Exit Interview Form is provided in Attachment No. 4.

In addition, the complainants were contacted by email with the results of the investigation on October 6, 2016.

### GENERAL FACILITY AND PROCESS INFORMATION

#### Process Description

Nalco is a chemical processing facility.

### BACKGROUND

#### Agreed Orders, Court Orders, and Other Compliance Agreements

Based on review of CCEDS and the regional office files, the following Agreed Order (AO) was issued by the TCEQ during the past 5 years:

2014-1561-AIR-E

#### Prior Enforcement Issues

Based on a review of CCEDS and the regional office files, violations were issued by the TCEQ to the alleged source during the past five years. There are no repeat violations.

#### Complaints

Based on a review of CCEDS, no complaints have been alleged during the past five years.

### ADDITIONAL INFORMATION

#### Conclusions, Recommendations, and Current Enforcement Actions

One violation was noted based upon conditions observed, information received, and records reviewed during this investigation. For more information, see the Summary of Investigation Finding below.

#### Additional Issues

No additional issues were noted during this investigation.

### REPORT ATTACHMENTS

1. Area Map
2. Survey Route Map
3. Investigator's Odor Log
4. Exit Interview Form
5. Thermal Oxidizer (TO) Temperature Log

**NOV Date** 10/06/2016 **Method** WRITTEN

**ALLEGED VIOLATION(S) NOTED AND RESOLVED  
ASSOCIATED TO A NOTICE OF VIOLATION**

**Track Number:** 617448

**Resolution Status Date:** 10/5/2016

**Violation Start Date:** 8/1/2016

**Violation End Date:** 8/1/2016

**30 TAC Chapter 116.115(c)**  
**30 TAC Chapter 122.143(4)**  
**5C THSC Chapter 382.085(b)**

PERMIT 3536, FOP Special Term & Condition (ST&C) 10

PERMIT 4005, NSR Special Condition (SC) 15

**Alleged Violation:**

**Investigation: 1350281**

Comment Date: 10/05/2016

Failure to maintain the thermal oxidizer (EPN: TO-1) above 1400 degrees Fahrenheit (F).

During a complaint investigation conducted on August 4, 2016, records provided by Nalco for the period of July 21, 2016 through August 3, 2016 indicated that the exit temperature of the Thermal Oxidizer (EPN: TO-1) was not maintained above the minimum of 1400 degrees F on August 1, 2016 from 20:14 to 20:25 (11 minutes). This constitutes a violation of New Source Review Permit 4005, Special Condition 15, which states, "The Thermal Oxidizer (EPN: TO-1)...The thermal oxidizer firebox exit temperature shall be maintained at not less than 1400 degree F..."

This also constitutes a violation of the following: FOP O-03536, Special Term and Condition (ST&C) 15; 30 TAC 122.143(4); 30 TAC 116.115(c); and Texas Health and Safety Code 382.085(b).

**Recommended Corrective Action:** No further action is required.

**Resolution:** Nalco provided records indicating a return to temperatures above 1400 degrees F.

Signed

*Regina Rhoda*  
Environmental Investigator

Date

*10/5/2016*

Signed

*Leticia Miller*  
Supervisor

Date

*10/6/16*

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

\_\_\_ Enforcement Action Request (EAR)

☒ Letter to Facility (specify type) : *NOV*

\_\_\_ Investigation Report

\_\_\_ Sample Analysis Results

\_\_\_ Manifests

\_\_\_ Notice of Registration

\_\_\_ Maps, Plans, Sketches

\_\_\_ Photographs

\_\_\_ Correspondence from the facility

☒ Other (specify) :

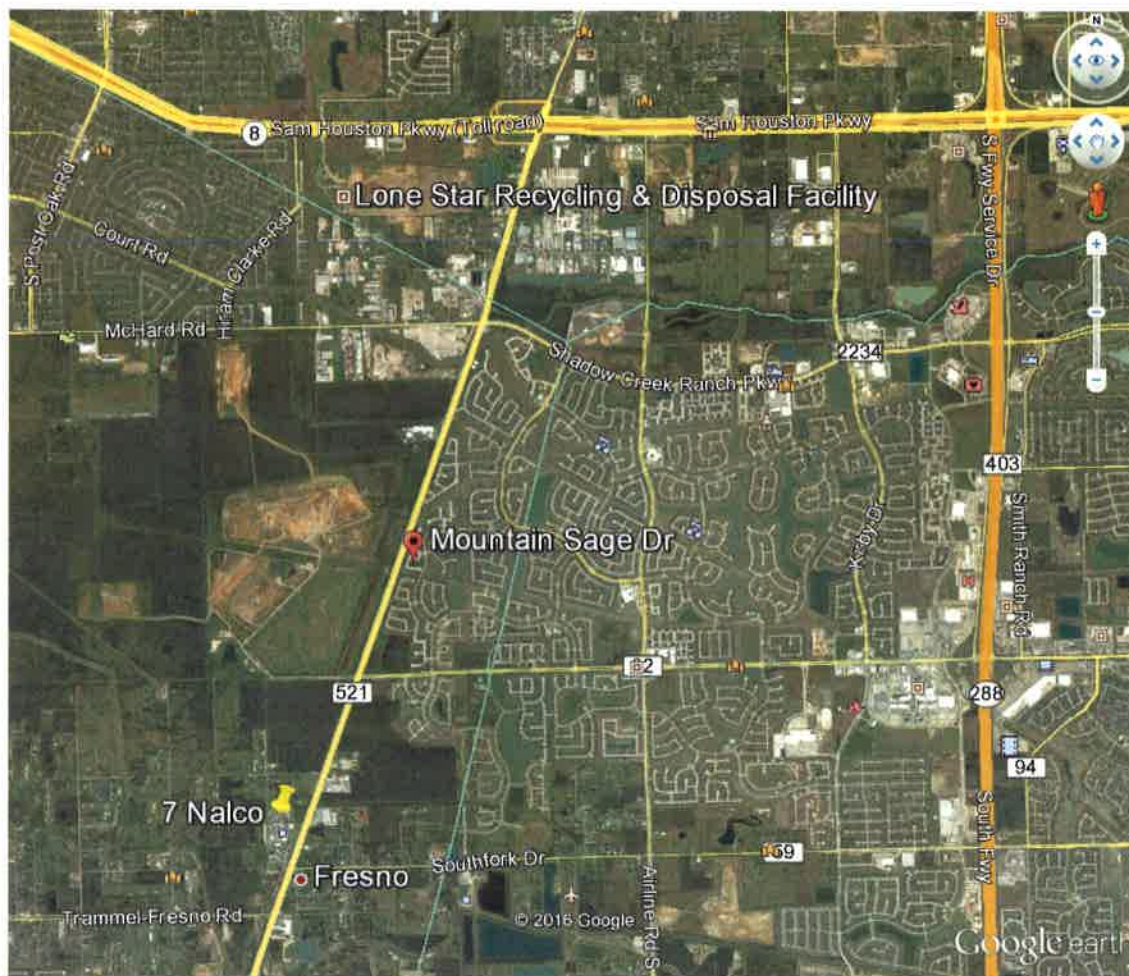
*See list of Report  
Attachments*



**Attachment 1**  
**Area Map**  
**Pearland, TX**  
**RN 101618882**  
**August 4, 2016**  
**Total pages 1**



Attachment 1  
Area Map  
Pearland, TX; Shadow Creek Ranch Subdivision  
8/4/2016



Investigation Type: CMPL  
Air Account NO: RN101618882  
Attachment: 1  
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**Attachment 2**  
**Survey Route Map**  
**Pearland, TX**  
**RN 101618882**  
**August 4, 2016**  
**Total pages 1**



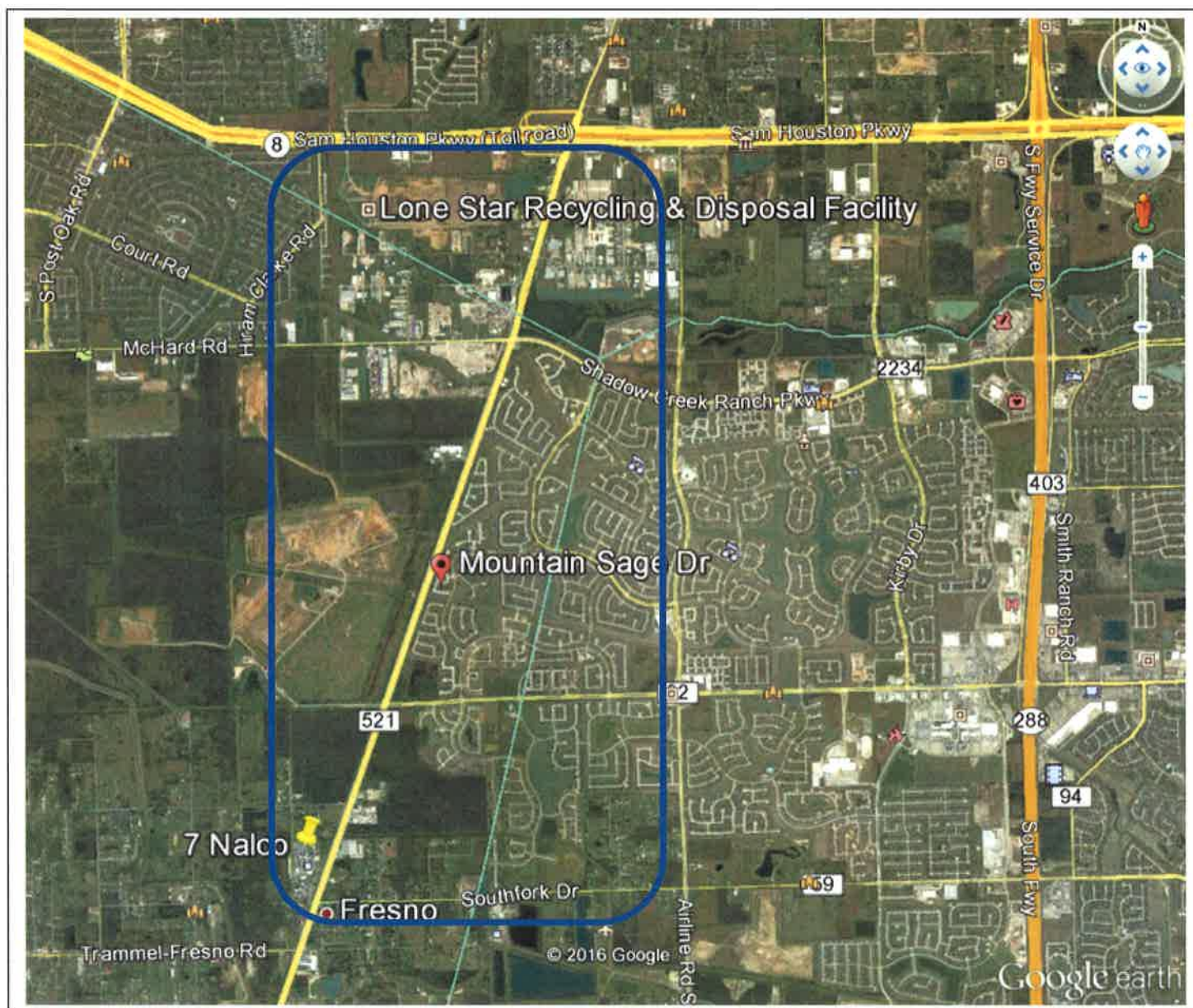
# Odor Survey Route Map

Weather 8/4/2016

Conditions:	Clear	Partly Cloudy	Cloudy	Overcast			Rain							
Wind Speed:	calm			Wind From:		NW	NNW	N	NNE	NE				
Temperature:	78.6 °F					WNW				ENE				
Humidity:	93 % RH					W		▲		E				
						WSW				ESE				
						SW	SSW	S	SSE	SE				

## ► Diagram

Odor survey taken at the intersection of Mountain Sage Dr. and Long Lake Dr.



Investigation Type: CMPL  
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**Attachment 3**  
**Investigator's Odor Log**  
**Pearland, TX**  
**RN 101618882**  
**August 4, 2016**  
**Total pages 1**



## Supplemental Investigator's Odor Intensity Time Log

Date of Investigation: 8/4/2016 Start Time: 5:50 am  
Mountain Sage Dr & Longlake Dr, Pearland

Minutes	Odor Intensity VL, L, M, S, VS
1 min	6:46 am M
2	M
3	M
4	M
5	M
6	M
7	M
8	M
9	S
10	M
11	M
12	S
13	M
14	L
15	M
16	M
17	VL
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	
44	
45	
46	
47	
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49	
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51	
52	
53	
54	
55	
56	
57	
58	
59	
60	

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

Weighted Average Intensity: 2.94 Moderates

	VS	S	M	L	VL	No Odor
1 Min						
10 Min		2	13	1	1	
1 Hour						

Investigation Type: C MPL

Air Account NO: RN 101618882

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**Attachment 4**  
**Exit Interview Form**  
**Nalco Fresno Facility**  
**RN 101618882**  
**August 4, 2016**  
**Total pages 1**



EXIT INTERVIEW FORM: Potential Violations and/or Records Requested					
Regulated Entity/Site Name	Nalco Company, LLC Fresno Facility		TCEQ Add. ID No. RN No (optional)	FG-0053-G RN 101618882	
Investigation Type	MNSR	Contact Made In-House (Y/N)	N	Purpose of Investigation	Compliance Investigation
Regulated Entity Contact	Mr. Chris Boyd		Telephone No.	281-431-2561	Date Contacted
Title	Plant Manager		E-mail:		Date Faxed:

NOTICE: The information provided in this Note is intended to provide clarity to issues that have arisen to the date of this Note during the investigation process between the agency and the company and does not represent agency findings related to violations. Any potential or alleged violations discovered after the date of this Note will be communicated by telephone to the regulated entity representative prior to the issuance of a notice of violation or enforcement. Conclusions drawn from this investigation, including additional violations or potential violations discovered (if any) during the course of this investigation, will be documented in this investigation's final report.

Issue		For Records Request, identify the necessary records, the company contact and date due to the agency. For Alleged and Potential Violation issues, include the rule in question with the clearly described potential problem. Other type of issues: fully describe.	
No.	Type <sup>1</sup>	Rule Citation (if known)	Description of Issue
1	AV	NSR 4005 SC 15	Failure to maintain the thermal oxidizer (EPN: TO-1) above 1400 degrees Fahrenheit
			Investigation Type: <u>CMP</u>
			Air Account NO: <u>RN 101618882</u>
			Attachment: <u>4</u>
			Page <u>1</u> of <u>1</u>

Note 1: Issue Type Can Be One or More of: AV (Alleged Violation), PV (Potential Violation), O (Other), or RR (Records Request)

Did the TCEQ document the regulated entity named above operating without proper authorization?	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes
Did the investigator advise the regulated entity representative that continued operation is not authorized?	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes

Document Acknowledgment. Signature on this document establishes only that the regulated entity (company) representative received a copy of this document and associated continuation pages on the date noted. If contact was made by telephone, document will be faxed to regulated entity; therefore, signature not required.	
Regina Rhoda (electronic signature)	9/7/2016
Investigator Name (Signed & Printed)	Date
Regulated Entity Representative Name (Signed & Printed)	Date

If you have questions about any information on this form, please contact your local TCEQ Regional Office. Individuals are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, call 512/239-3282.



Attachment 5  
Thermal Oxidizer (TO) Temperature Log  
Nalco Fresno Facility  
FG-0053-G  
RN 101618882  
August 4, 2016  
Total pages 1



Tag:	\\usfrspipr10\TO.TT4	Tag:	\\usfrspipr10\TT.41100
Description:	TO Top Temperature	Description:	TO Middle Temperature

Date + Time	Value (Deg F)	Date + Time	Value (Deg F)
8/1/2016 20:07	1601.941	8/1/2016 20:07	1674.063
8/1/2016 20:08	1601.882	8/1/2016 20:08	1674.01
8/1/2016 20:09	1601.822	8/1/2016 20:09	1673.956
8/1/2016 20:10	1601.762	8/1/2016 20:10	1673.903
8/1/2016 20:11	1601.703	8/1/2016 20:11	1673.85
8/1/2016 20:12	1595.254	8/1/2016 20:12	1667.564
8/1/2016 20:13	1444.872	8/1/2016 20:13	1497.499
8/1/2016 20:14	1258.368	8/1/2016 20:14	1269.94
8/1/2016 20:15	1097.55	8/1/2016 20:15	1083.695
8/1/2016 20:16	972.8406	8/1/2016 20:16	940.2146
8/1/2016 20:17	869.189	8/1/2016 20:17	821.9071
8/1/2016 20:18	782.3416	8/1/2016 20:18	724.0968
8/1/2016 20:19	709.7058	8/1/2016 20:19	643.6533
8/1/2016 20:20	645.6932	8/1/2016 20:20	578.2145
8/1/2016 20:21	597.3932	8/1/2016 20:21	527.1645
8/1/2016 20:22	574.6817	8/1/2016 20:22	505.1247
8/1/2016 20:23	653.9323	8/1/2016 20:23	563.7083
8/1/2016 20:24	1269.407	8/1/2016 20:24	1178.811
8/1/2016 20:25	1647.871	8/1/2016 20:25	1764.825
8/1/2016 20:26	1594.806	8/1/2016 20:26	1725.56
8/1/2016 20:27	1600.31	8/1/2016 20:27	1710.192
8/1/2016 20:28	1597.798	8/1/2016 20:28	1694.45
8/1/2016 20:29	1597.603	8/1/2016 20:29	1683.364

Investigation Type: C M P L  
Air Account NO: RN 101618882  
Attachment: 5  
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