RECEIVED

By Alameda County Environmental Health 10:33 am, Aug 26, 201:

May 18, 2015

Ms. Donna Drogos Alameda County Environmental Health 1131 Harbor Parkway, Suite 250 Oakland, CA 94502-6577

Subject:

Semi-Annual Discharge Report

Permit No. 68508758

403 East 12th Street, Oakland, Alameda County, California

RO #0002931

ECG # GHA.19009

Dear Ms. Drogos:

Enclosed please find a copy of the *Semi-Annual Discharge Report* for the above referenced site prepared by our consultant Environmental Compliance Group, LLC.

I declare, under penalty and perjury, that the information and/or recommendations contained in this report are true and correct to the best of my knowledge.

Respectfully,

Rashid Ghafoor

1-5/2



270 Vintage Drive Turlock, CA 95382 P: 209.664.1035 F: 209.664.1040

May 18, 2015

Ms. Audrey Comeaux EBMUD Environmental Services Division MS 702 P.O. Box 24055 Oakland, CA 94623

Subject:

Semi-Annual Discharge Report

Permit No. 68508758 403 East 12th Street Oakland, CA

Dear Ms. Comeaux:

Environmental Compliance Group, LLC (ECG) is authorized by Rashid Ghafoor to submit this letter documenting the sewer discharge operations for October 1, 2014 through March 31, 2015. This letter is prepared in accordance with the East Bay Municipal Utilities District (EBMUD), *Wastewater Discharge Permit No. 68508758*, issued April 16, 2014.

The groundwater treatment system was started on April 30, 2014. During this reporting period from April 1 to September 30, 2014, the groundwater system discharged approximately 271,372 gallons of treated groundwater to the sewer. For the reporting period the average discharge was 1,681 gallons per day and 1.2 gallons per minute. Groundwater discharge data are shown on Table 1.

A sample of the effluent groundwater discharge was collected on October 28, 2014 and contained no detectable concentrations of petroleum hydrocarbons. Detectable concentrations of inorganics were within permit requirements. Analytical laboratory data sheets are attached.

The groundwater treatment system was shut down on February 18, 2015 and the above ground propane tank that provided supplemental fuel to the remediation equipment was removed from the site due to conflicts with the site tenants and residential neighbors. PG&E is scheduled to install natural gas service to the site by the end of June 2015. Once the natural gas installation has been completed, ECG will provide an updated site plan map and process and flow diagram to EBMUD and restart the remediation equipment.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations

If you have any questions or concerns please contact me with any concerns or questions at 209.664.1035.

Sincerely,

Environmental Compliance Group, LLC

Drew Van Allen

Senior Project Manager

Michael S. Sgourakis Principal Geologist

Mul S Syll

CA P.G. No. 7194

Table 1
Groundwater Treatment System Performance Data

Shore Acres Gas 403 East 12th Street Oakland, California

DATE	TOTAL FLOW (gallons)	AVG. PERIOD FLOW RATE (gallons/min)
04/30/14	189,810	Unit Start Up
05/30/14	322,420	3.07
06/27/14	358,850	0.90
07/30/14	NM	NM
08/29/14	393,900	0.39
09/30/14	463,870	1.52
10/28/14	495,020	0.77
12/01/14	564,925	1.43
12/31/14	696,150	3.04
01/20/15	730,151	1.18
02/18/15	766,392	0.87

302,522 total gallons pumped during current reporting period
1681 average gallons per day during current reporting period
1.2 average gallons per minute during current reporting period

Notes:

Groundwater flow meter was 189,910 when unit was started up
The system was shut down from July 27 to August 15, 2014 for carbon change out
The system operated for approximately 120 days between April 1 and September 30, 2014
The system was shut down on February 18, 2015 for change out of propane for natural gas
NM - Not measured

argon laboratories

21 November 2014

Mike Sgourakis Environmental Compliance Group, LLC 270 Vintage Drive Turlock, CA 95382

RE: Shore Acres Gas Project Data

Enclosed are the results for sample(s) received on 11/05/14 11:15 by Argon Laboratories. The sample(s) were analyzed according to instructions in accompanying chain-of-custody. Results are summarized on the following pages.

Please see quality control report for a summary of QC data pertaining to this project.

The sample(s) will be stored for 30 days after completion of analysis, then disposed of in accordance with State and Federal regulations. Sample(s) may be archived by prior arrangement.

Thank you for the opportunity to service the needs of your company.

Sincerely

Lab Manager

Argon Labs 2905 Railroad Ave., Ceres, CA 95307

CHAIN OF CUSTODY

(209)581-9280 F	ax (209)581-9		@argonlabs.com																	
Project No: (HA. Jer	255	AL S		Cilent	-	·							-	-					. 44.
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Argon Laboratories Sample Receipt Checklist

Client Name:	Environmental	Comp	oliance G	roup		_			Date	& Time	Received	: <u>1</u>	1/05/14		11:15
Project Name:	Shore Acres G	as							Clien	it Projec	t Number:	:	GHA	.1900	9
Received By:	HC		-	Mat	rix:	Water	$\overline{\checkmark}$	S	oil			Slud	lge		
Sample Carrier:	Client 🔽	Lab	oratory		Fed Ex		UP	S		Other					
Argon Labs Project	Number:	<u>P41</u>	<u>1004</u>												
Shipper Container in	good condition?					Sample	s receiv	ed in	prope	er contair	ners?	Yes	1	No	
	N/A	Yes	V	No		Sample	s receiv	ed in	tact?			Yes	V	No	
Samples received und	der refrigeration?	Yes	V	No		Sufficie	nt sampl	le vo	lume i	for reque	sted tests?	? Yes	V	No	
Chain of custody pres	ent?	Yes	V	No		Sample	s receive	ed w	ithin h	nolding tir	ne?	Yes	y	No	
Chain of Custody sign	ed by all parties?	Yes	V	No		Do sam	ples con	ntain	prope	er preserv N/A	rative?	Yes	7	No	
Chain of Custody mat	ches all sample la	bels?				Do VOA	vials con	tain z	zero he	eadspace?	•				
		Yes	$\overline{\checkmark}$	No				(N	lone s	ubmitted	□)	Yes	1	No	
	ANY "N	o" RE	SPONSE	MUST	BE DETA	ILED IN	THE CC	MM	ENTS	SECTIO	N BELOW	ł			
Date Client Contact	ed.				Dor										
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Contacted By:					Subject:										
Comments:															
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Action Taken:															
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Contacted By:					_	Da	ite:					Time	e:		
Call Received By: _												,,,,,			_
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Environmental Compliance Group, LLC

270 Vintage Drive

Turlock, CA 95382

Project Number: GHA.19009

Project Name: Shore Acres Gas

Project Manager: Mike Sgourakis

Work Order No.:

P411004

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Effluent	P411004-01	Water	10/28/14 11:30	11/05/14 11:15

Environmental Compliance Group, LLC

270 Vintage Drive Turlock, CA 95382 Project Number: GHA.19009

Project Name: Shore Acres Gas

Project Manager: Mike Sgourakis

Work Order No.:

P411004

ANALYSIS REPORT

	, <u>, .</u>	Reporting		- V-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-			****
Analyte	Result	Limit	Units	Dilution	Analyzed	Method	Notes
Effluent (P411004-01) Water	Sampled: 28-Oct-14 11:30 Recei	ved: 05-Nov	-14 11:15				
рН	7.7	0.1	pH Units	1	05-Nov-14	SM 4500-H+B	

Environmental Compliance Group, LLC

270 Vintage Drive Turlock, CA 95382 Project Number: GHA,19009

Project Name: Shore Acres Gas

Project Manager: Mike Sgourakis

Work Order No.:

P411004

ICP-MS Metals EPA Method 200.8

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
Effluent (P411004-01) Water	Sampled: 28-Oct-14 11:30	Received: 05-Nov	-14 11:15		-		
Antimony	64	1.0	ug/L	1	20-Nov-14	200,8	
Arsenic	160	1.0	"	H	IT	n	
Barium	110	5.0	т .	tr.	н	n	
Beryllium	ND	2.0	Ħ	11	11	"	
Cadmium	ND	1.0	n	**	н	H	
Chromium	ND	1.0	44	u	11	11	
Cobalt	ND	1.0	u	u	11	ч	
Copper	480	5.0	a	и	п	ш	
Lead	270	1.0	u .	m.	п	u	
Mercury	ND	0.10	n,	n	"	U	
Molybdenum	12	1.0	"	н	и	n	
Nickel	53	5,0	"	n	14	n	
Selenium	ND	1.0	**	n	ч	. "	
Silver	ND	1.0	nt.	tt.	14	11	
Challium Challium	ND	1.0	н	11	н	11	
Vanadium	ND	1.0	н	11	11	м	
Zinc	110	5.0	u	11	u	u	

Environmental Compliance Group, LLC

270 Vintage Drive Turiock, CA 95382 Project Number: GHA.19009

Project Name: Shore Acres Gas

Project Manager: Mike Sgourakis

Work Order No.: P411004

Volatile Organic Compunds by GC/MS - EPA Method 624

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
Effluent (P411004-01) Water	Sampled: 28-Oct-14 11:30					· · · · · · · · · · · · · · · · · · ·	
Benzene	ND	0.5	ug/L	1	10-Nov-14	EPA 624	
Bromodichloromethane	ND	0.5	4	(I	U	и	
Bromoform	ND	0.5	u	a	II	II .	
Bromomethane	ND	0.5	U	u	п	n	
Carbon tetrachloride	ND	0.5		U	0	n	
Chlorobenzene	ND	0.5	n	"	u	rr .	
Chloroethane	ND	0.5	"	n	ıı	17	
2-Chloroethylvinyl ether	ND	1.0	"	"	Ū	14	
Chloroform	ND	0.5	Ħ	Tr.	II	u	
Chloromethane	ND		n	11	II	u .	
Dibromochloromethane	ND		11	n	11		
1,2-Dichlorobenzene	ND		u	11))	"	
1,3-Dichlorobenzene	ND		9	ч	"	,,	
1,4-Dichlorobenzene	ND	0.5	п	a	"	n	
Dichlorodifluoromethane	ND		n .	U	п	#	
1,1-Dichloroethane	ND		"	п	n	#	
1,2-Dichloroethane	ND		rr .	U	11	**	
1,1-Dichloroethene	ND		H	U	"	"	
cis-1,2-Dichloroethene	ND	0.5	"	,,	"	u	
trans-1,2-Dichloroethene	ND	0.5	"	n	11	н	
1,2-Dichloropropane	ND	0.5	11	n .	n	п	
cis-1,3-Dichloropropene	ND	0.5	и	t†	п	n	
trans-1,3-Dichloropropene	ND	0.5	ш	ır	n	"	
Ethylbenzene	ND	0.5	u	II.	"	"	
Methylene chloride	ND	0,5	u u	11	n	n	
Tetrachloroethene	ND	0.5		ıt	n .	n	
Toluene	ND	0.5	11	я	п	It.	
Trichloroethene	ND	0.5	n	и	п	11	
Trichlorofluoromethane	ND	0.5	n	u	п	**	
Vinyl chloride	ND	0.5	n	u	II .	ч	
Xylenes (total)	ND	1.0	rr .	u	п	и	
Surr. Rec.;		94 %			n		
Surr. Rec.:		93 %			u	, n	
Surr. Rec.;		88 %			n	п	

Approved By

aboratories 2905 Railroad Ave. Ceres, CA 95307 (209)581-9280 Fax (209)581-9282

Environmental Compliance Group, LLC

270 Vintage Drive Turlock, CA 95382 Project Number: GHA.19009

Project Name: Shore Acres Gas

Project Manager: Mike Sgourakis

Work Order No.:

P411004

ANALYSIS REPORT - Quality Control

Argon Laboratories

1		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes

Batch P401307 - General Prep

LCS (P401307-BS1)			*	Analyzed: 11/05/14		
pН	6.90	pH Units	7.0	99	95-105	

Environmental Compliance Group, LLC

270 Vintage Drive Turlock, CA 95382 Project Number: GHA.19009

Project Name: Shore Acres Gas

Project Manager: Mike Sgourakis

Work Order No.:

P411004

ICP-MS Metals EPA Method 200.8 - Quality Control

Argon Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch P401306 - EPA 3005A										
Blank (P401306-BLK1)				Prepared &	Analyzed:	11/20/14				
Antimony	ND	1.0	ug/L							
Arsenic	ND	1.0	11							
Barium	ND	5.0	11							
Beryllium	ND	2.0	u							
Cadmium	ND	1.0	6							
Chromium	ND	1,0	п							
Cobalt	ND	1.0	n							
Copper	ND	5.0	"							
Lead	ND	1.0	n							
Mercury	ND	0.10	H							
Molybdenum	ND	1.0	I+							
Nickel	ND	5,0	"							
Selenium	ND	1.0	11							
Silver	ND	1,0	u							
Thallium	ND	1.0	a							
Vanadium	ND	1,0	"							
Zinc	ND	5.0								
LCS (P401306-BS1)				Prepared &	: Analyzed:	11/20/14				
Antimony	53.50		ug/L	50		107	80-120	,		
Arsenic	52.00		n	50		104	80-120			
Barium	53.00		n	50		106	80-120			
Beryllium	54.50		n	50		109	80-120			
Cadmium	52.00		**	50		104	80-120			
Chromium	53.00		**	50		106	80-120			
Cobalt	49.50		11	50		99	80-120			
Copper	53.00		11	50		106	80-120			
Lead	53,00		ď	50		106	80-120			
Mercury	1.14		и	1.2		95	80-120			
Molybdenum	50,50		a	50		101	80-120			
Nickel	52.50		,	50		105	80-120			
Selenium	52,00			50		104	80-120			
Silver	51.00		n	50		102	80-120			
Thallium	48.00		n	50		96	80-120			*
Vanadium	53.00		"	50		106	80-120			
Zinc	530.0		**	500		106	80-120			

Approved By

Environmental Compliance Group, LLC

270 Vintage Drive Turlock, CA 95382 Project Number: GHA.19009

Project Name: Shore Acres Gas

Project Manager: Mike Sgourakis

Work Order No.:

P411004

ICP-MS Metals EPA Method 200.8 - Quality Control

Argon Laboratories

Analyte	D!	Reporting	FT	Spike	Source	A/DEC	%REC	D DY	RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Note
Batch P401306 - EPA 3005A										
Matrix Spike (P401306-MS1)	Sou	rce: P411004-0)2	Prepared &	Analyzed:	11/20/14				
Antimony	53.00		ug/L	50	ND	106	70-130			
Arsenic	52,50		17	50	1.10	103	70-130			
3arium	54.50		**	50	10.00	89	70-130			
Beryllium	47.50		"	50	ND	95	70-130			
Cadmium	50.00			50	ND	100	70-130			
Chromium	49.00			50	2.10	94	70-130			
Cobalt	44.00			50	1,90	84	70-130			
Copper	51.00		n	50	5.10	92	70-130			
ead	50.50		."	50	ND	101	70-130			
Mercury	1.20		n	1.2	ND	100	70-130			
Aolybdenum	51.50		**	50	ND	103	70-130			
Jickel	53.90		17	50	5.69	96	70-130			
elenium	53.50		н	50	ND	107	70-130			
ilver	47.50		"	50	ND	95	70-130			
ballium	46.00		u	50	ND	92	70-130			
'anadium	51.00			50	ND	102	70-130			
inc	505.0		u	500	13.00	98	70-130			
Aatrix Spike Dup (P401306-MSD1)	Sou	rce: P411004-0	12	Prepared &	: Analyzed:	11/20/14				
ntimony	52.50		ug/L	50	ND	105	70-130	0.9	20	
rsenic	53,00		"	50	1.10	104	70-130	0.9	20	
arium	53.00		"	50	10.00	86	70-130	3	20	
eryllium	48.00		"	50	ND	96	70-130	1	20	
admium	49.50		"	50	ND	99	70-130	1	20	
hromium	50,00		**	50	2,10	96	70-130	2	20	
obalt	46.50		17	50	1.90	89	70-130	6	20	
opper	48,50		п	50	5,10	87	70-130	5	20	
ead	51.00		17	50	ND	102	70-130	1	20	
fercury	1,24		11	1,2	ND	103	70-130	3	20	
Iolybdenum	51.50		**	50	ND	103	70-130	0	20	
ickel	50,60		11	50	5,69	90	70-130	6	20	
elenium	54.50		"	50	ND	109	70-130	2	20	
ilver	47,50			50	ND	95	70-130	0	20	
hallium	45.50			50	ND	91	70-130	1	20	
anadium	51,50		п	50	ND	103	70-130	1	20	
								-		

Approved By

Environmental Compliance Group, LLC

270 Vintage Drive Turlock, CA 95382 Project Number: GHA.19009

Reporting

Project Name: Shore Acres Gas

Project Manager: Mike Sgourakis P411004

%REC

Work Order No.:

RPD

Volatile Organic Compunds by GC/MS - EPA Method 624 - Quality Control

Spike

Source

Prepared & Analyzed: 11/10/14

Argon Laboratories

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P401282 - EPA 5030B										
Blank (P401282-BLK1)				Prepared &	k Analyzed;	11/10/14				
Surrogate: Dibromofluoromethane	51.0		ug/L	50		102	70-130			
Surrogate: Toluene-d8	50.5		"	50		101	70-130			
Surrogate: 4-Bromofluorobenzene	43.5		"	50		87	70-130			
Benzene	ND	0.5	n							
Bromodichloromethane	ND	0.5	Ħ							
Bromoform	ND	0,5	11							
Bromomethane	ND	0,5	11							
Carbon tetrachloride	ND	0,5	n							
Chlorobenzene	ND	0.5	и							
Chloroethane	ND	0.5	u							
2-Chloroethylvinyl ether	ND	1.0	"							
Chloroform	ND	0,5	n							
hloromethane	ND	0.5	0							
Dibromochloromethane	ND	0.5	"							
,2-Dichlorobenzene	ND	0.5	*							
,3-Dichlorobenzene	ND	0.5	n							
,4-Dichlorobenzene	ND	0.5	TP .							
Dichlorodifluoromethane	ND	0.5	11							
,1-Dichloroethane	ND	0.5	1†							
,2-Dichloroethane	ND	0.5	19							
,1-Dichloroethene	ND	0.5	**							
is-1,2-Dichloroethene	ND	0.5	11							
rans-1,2-Dichloroethene	ND	0.5	u							
,2-Dichloropropane	ND	0.5	u							
is-1,3-Dichloropropene	ND	0.5	u							
ans-1,3-Dichloropropene	ND	0.5	u							
thylbenzene	ND	0.5	n.							
fethylene chloride	ND	0.5	n							
etrachloroethene	ND	0.5	ıı							
oluene	ИD	0.5	n							
richloroethene	ND	0.5	n							
richlorofluoromethane	ND	0.5	"							
'inyl chloride	ND	0.5	"							
ylenes (total)	ND	1.0	"							

Approved By

LCS (P401282-BS1)

laboratories 2905 Railroad Ave. Ceres, CA 95307 (209)581-9280 Fax (209)581-9282

Environmental Compliance Group, LLC

270 Vintage Drive Turlock, CA 95382 Project Number: GHA.19009

Project Name: Shore Acres Gas

Project Manager: Mike Sgourakis

Work Order No.:

P411004

Volatile Organic Compunds by GC/MS - EPA Method 624 - Quality Control

Argon Laboratories

Analyte	Reporting Result Limit Units		Units	Spike	Source	0/DEC	%REC	DDD	RPD	37.4
	Restut	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch P401282 - EPA 5030B										
LCS (P401282-BS1)	Prepared & Analyzed: 11/10/14									
Вепгеле	26.5		ug/L	25		106	80-120			
Chlorobenzene	25,3		"	25		101	80-120			
1,1-Dichloroethene	26.5		n	25		106	80-120			
Toluene	28,2		11	25		113	80-120			
Trichloroethene	23.4		17	25		94	80-120			
LCS Dup (P401282-BSD1)	Prepared & Analyzed: 11/10/14									
Benzene	23.9		ug/L	25		96	80-120	10	20	
Chlorobenzene	26.8			25		107	80-120	6	20	
I,1-Dichloroethene	23.9			25		96	80-120	10	20	
Toluene	25.5		"	25		102	80-120	10	20	
Trichloroethene	25.9		н	25		104	80-120	10	20	

Environmental Compliance Group, LLC

270 Vintage Drive Turlock, CA 95382 Project Number: GHA.19009
Project Name: Shore Acres Gas

Project Manager: Mike Sgourakis P411004

Work Order No.:

Notes and Definitions

DET

Analyte DETECTED

ND

Analyte NOT DETECTED at or above the reporting limit

NR

Not Reported

dry

Sample results reported on a dry weight basis

RPD

Relative Percent Difference