

II - C

1ST QUARTER REPORT - 2011

**QUARTERLY PROGRESS REPORT - 1<sup>st</sup> QUARTER 2011**  
***Operation, Maintenance and Long-term Monitoring Activities***

**PROJECT NAME:** *Pollution Abatement Services Site  
Oswego, New York*

**PERIOD COVERED:** January – March (1<sup>st</sup> Quarter) 2011

**ACTIONS TAKEN DURING QUARTER:**

- Leachate removal and site maintenance and monitoring activities were conducted at the Pollution Abatement Services (PAS) site (Site) in Oswego, New York by O'Brien & Gere Operations LLC, (O'Brien & Gere) consistent with the PAS Site Operation, Maintenance and Long-term Monitoring Plan (Work Plan).
- A total of 30,010 gallons of leachate were removed during the period of January 2011 thru March 2011. Specific quantities of leachate removed during each month, along with historical leachate removal documentation, are described in this quarterly progress report.
- Leachate was pumped from the Site and discharged into the City of Oswego sanitary sewer system. Leachate discharged into the Oswego sewer system was treated and disposed in Oswego's Eastside Wastewater Treatment Facility located at 71 Mercer St. in Oswego.
- Routine ground water elevation monitoring was performed at the Site on January 5, February 9 and March 2, 2011. Monthly ground-water elevation monitoring results for the SWW-series monitoring wells (SWW-1 through SWW-12), and leachate collection wells (LCW-1 through LCW- 4) were recorded on the Groundwater Elevation Monitoring Log.
- On February 9, 2011, quarterly ground-water elevation monitoring was performed at the Site. Quarterly ground-water elevation monitoring results for the M-series wells - M-21 thru M-23, the LR-series wells - LR-2, -3, -6 and -8, the LD-series wells - LD-3, -4, -5, -6, and -8, along with wells OS-1 and -3, OI-1, OD-3 and LS-6 were recorded onto the Ground-water Elevation Monitoring Log.
- Site inspection and maintenance activities were conducted monthly, in conjunction with each leachate removal event. In addition, quarterly site inspection and maintenance activities were completed on March 30, 2011. Inspection and maintenance activities at this site included the following:
  - Visually inspected the slurry wall containment vegetated cap for signs of burrowing vermin or surface anomalies. No discrepancies were reported.

- Visually inspected the leachate collection system pumping equipment to verify proper operation. The field technician inspected each pump control panel to ensure control systems were generally free of rodents and insects, and where properly operating. The leachate holding tank was visually inspected for integrity, as were the leachate tank's steel roof, and wood structure. No discrepancies were reported.
  - Visually inspected the wooden utility shed and leachate pumping equipment, including centrifuge discharge pump, flow meter, suction hose, pump oil levels, heat trace power panel, interior lighting, exterior and interior shed structure, and main power distribution panel. No discrepancies were reported.
  - The single french drainage system and two concrete troughs were inspected. No discrepancies were reported.
  - The perimeter security fence was inspected on March 30, 2011 to ensure the integrity and the security of the site is maintained. Security fencing was inspected for the presence of any fallen tree limbs or overgrown vegetation. The field technician removed shallow rooted vegetation or other similar vegetation that had grown up along the security fence, or had fallen onto the fence from the bordering woodlands. A section of the perimeter fence in a low-lying area along the northeastern property line was observed to be in need of additional brush-clearing and fence straightening.
  - During the month of January and March, accumulated snowfall was removed from the sites access road and gate area using a snow plow mounted onto a service truck. Accumulated snow was pushed off from the sites entry road piled onto the paved parking area adjacent to the wooden storage shed.
  - The Site Inspection Checklist form was utilized to document any comments pertaining to site conditions referenced above.
- On January 5, February 9 and March 2, 2011, an O'Brien & Gere performed the monthly pre-pumping collection system inspection, of leachate collection wells LCW-1, 2, & 4, along with inspection of the leachate discharge pumping system. The leachate pumping system consists of one electrically powered leachate discharge pump, flow totalizer and leachate sampling port, all located within the on-site utility shed. In advance of each leachate removal event, O'Brien & Gere contacted the City of Oswego Eastside Wastewater Treatment Facility official, to inform the City of the date leachate was planned to be discharged into the City of Oswego sanitary sewer system. The date of each leachate pumping event was acknowledged by the City of Oswego, prior to the commencement of each discharge event.

- Upon completing the monthly leachate collection well inspection, the technician manually energized three leachate collection pumps, identified as LCW-1, LCW-2 and LCW-4, in order to pump the planned volume of leachate into the leachate collection tank. The run time from each leachate collection pump, along with the leachate tank level taken upon completion of well pumping, was recorded on the Leachate Disposal Checklist.
- During the months of January, February and March 2011, O'Brien & Gere pumped 30,010 gallons of leachate from the leachate collection tank into the City of Oswego sanitary sewer system. The amount of leachate discharged during each removal event, along with flow totalizer, pH and temperature readings, were recorded on the Leachate Disposal Checklist completed for each removal event. The level of leachate remaining in the leachate collection tank after each leachate discharge pumping event is also recorded on the Leachate Disposal Checklist. Each monthly leachate discharge was performed using same discharge protocols.
- On March 2, 2011, one semi-annual leachate discharge composite sample was collected by O'Brien & Gere as required by the City of Oswego wastewater discharge permit. The sample was collected for analysis by compositing three grab samples taken from the leachate discharge pump sample port. The sample chain of custody was completed, and the sample delivered to Life Sciences Laboratories at the completion of the March 2, 2011 pumping activities.
- Upon completing each monthly removal event, the leachate discharge system was drained of residual leachate and prepared for storage. Residual leachate removed was disposed into the leachate collection tank. The leachate collection tank enclosure door was locked and secured. The discharge piping heat trace system was verified to be on, and the utility shed secured prior to leaving the site, O'Brien & Gere closed and secured the chain lock at the main entrance gate.

**DOCUMENTATION OF REMOVAL ACTIVITIES DURING QUARTER:**

- The completed ground-water elevation monitoring logs for the monitoring events performed on January 5, February 9 and March 2, 2011 are attached. (See Attachment C-1)
- The completed Site Inspection Checklist forms for the monthly removal events of January 5, February 9 and March 2, 2011 are attached (See Attachment C-2).
- The completed Leachate Disposal Checklist forms for the monthly removal events of January 5, February 9 and March 2, 2011 are attached. (See Attachment C-2)
- A copy of the PAS Oswego Site quarterly discharge report (1<sup>st</sup> quarter 2011) submitted to the City of Oswego on April 26, 2011 is attached. (See Attachment C-3). This quarterly discharge report includes the semi-annual leachate quality discharge sampling results conducted for the City of Oswego Wastewater Discharge Permit. The date of the leachate discharge sampling, along with the discharge flow totalizer, pH and temperature readings, are recorded on the attached March 2, 2011 Leachate Disposal Checklist forms included herein.

*ATTACHMENT C-1*

*GROUND-WATER ELEVATION DATA*



O'Brien Corporation  
 PA State  
 Oswego, New York  
 Pre-Pumping Monitoring Well Levels

February 9, 2011  
 7:45 AM

Well Number	Ground		Riser		February 2010			Within Range?			Ground-Water	
	Elevation		Elevation		Reading 1	Reading 2	Reading 3	Average	Low	High	Y / N	Elevation
SWW1	286.20		289.33		9.52	9.52	9.52	9.17	8.11	9.74	Yes	279.81
SWW2	286.30		289.37		15.26	15.26	15.26	15.69	15.15	16.08	Yes	274.11
SWW3	286.00		286.50		16.96	16.96	16.96	17.20	16.37	19.94	Yes	269.54
SWW4	282.90		283.60		14.10	14.10	14.10	14.62	12.55	15.58	Yes	269.50
SWW5	275.90		277.02		13.24	13.24	13.24	13.04	12.55	13.58	Yes	263.78
SWW6	270.90		273.06		7.90	7.90	7.90	8.53	8.10	8.90	No	265.16
SWW7	273.30		277.93		8.02	8.02	8.02	8.08	7.63	8.30	Yes	269.91
SWW8	275.70		278.24		3.94	3.94	3.94	4.08	3.80	4.30	Yes	274.30
SWW9	283.30		285.55		17.15	17.15	17.15	17.18	16.40	18.00	Yes	268.40
SWW10	279.30		280.43		10.80	10.80	10.80	11.26	9.20	12.40	Yes	269.63
SWW11	271.00		273.50		9.64	9.64	9.64	9.09	8.47	9.71	Yes	263.86
SWW12	270.20		272.82		9.02	9.02	9.02	8.79	8.35	9.20	Yes	263.80
LCW-1	271.40		272.21		8.86	8.86	8.86	8.51	7.90	9.22	Yes	263.35
LCW-2	272.60		274.44		11.10	11.10	11.10	10.75	10.14	11.46	Yes	263.34
LCW-3	283.30		284.36		17.54	17.54	17.54	17.74	17.55	18.26	No	266.82
LCW-4	283.80		285.70		18.52	18.52	18.52	18.31	17.35	19.42	Yes	267.18
OS-1	269.63		272.10		10.65	10.65	10.65	9.64	8.34	10.80	Yes	261.45
OI-1	269.14		272.00		11.48	11.48	11.48	11.16	10.90	11.20	No	260.52
OS-3	274.63		277.89		14.62	14.62	14.62	13.83	13.32	14.05	No	263.27
OD-3	274.96		277.85		14.38	14.38	14.38	13.67	13.20	13.91	No	263.47
LD-3	275.80		278.62		4.42	4.42	4.42	4.31	4.18	4.36	No	274.20
LD-4	276.30		279.25		10.2	10.20	10.20	10.33	9.84	11.23	Yes	269.05
LD-5	270.02		272.94		9.48	9.48	9.48	8.97	8.63	8.92	No	263.46
LS-6	271.40		274.14		11.28	11.28	11.28	9.90	8.75	10.02	No	262.86
LD-6	270.09		274.03		10.82	10.82	10.82	10.09	9.58	10.07	No	263.21
LD-8	269.90		272.83		8.04	8.04	8.04	7.11	6.56	7.28	No	264.79
LR-2	287.50		289.85		13	13.00	13.00	12.94	12.64	13.30	Yes	276.85
LR-3	275.50		278.06		7.94	7.94	7.94	8.00	7.90	8.12	Yes	270.12
LR-6	270.90		274.39		10.55	10.55	10.55	10.33	10.18	10.29	No	263.84
LR-8	270.00		273.42		10.05	10.05	10.05	9.71	9.45	9.73	No	263.37
M-21	270.28		272.32		10.44	10.44	10.44	9.58	9.18	9.40	No	261.88
M-22	270.40		273.88		9.62	9.62	9.62	10.04	10.11	10.22	No	264.26
M-23	267.98		270.49		12.6	12.60	12.60	12.43	12.05	12.65	Yes	257.89





***ATTACHMENT C-2***

***SITE INSPECTION CHECKLIST  
AND LEACHATE DISPOSAL CHECKLIST***



# O'BRIEN & GERE

PAS Oswego  
Oswego, NY

## Site Inspection Checklist

Date 1-5-11

Time 9:00

Field Technician MARTIN KOENWECKE

Weather Conditions P-Sunny 26°

Inspection Features	Check ✓	Remarks
<b>Land Cap</b>		
Signs of burrowing vermin	✓	SNOW COVERED
Land cap irregularities (note anomaly)	✓	OK
French drainage system clear and function able	✓	SNOW COVERED 12"-16"
Concrete trough clear and function able	✓	OK
<b>Leachate Discharge System</b>		
City of Oswego sanitary discharge valve positioned "Open"	✓	Yes
Discharge Pump inspected & operational	✓	Yes
Discharge pump oil level verified prior to use.	✓	Yes
Discharge pump drained of residual water (drained upon completion of use)	✓	Yes
Heat trace system operational & verified in the "ON" position (during wintertime periods)	✓	ON
Flow totalizer operational. Flow readings recorded onto "Leachate Discharge Form"	✓	Yes
<b>Leachate Collection System</b>		
Leachate holding tank visually inspected for structural integrity	✓	OK
Leachate holding tank metal roof inspected for structural integrity	✓	OK
Leachate tank access doors locked (post pumpout)	✓	Yes
Pump power panel(s) secured	✓	Yes
<b>Monitoring Wells (MW)</b>		
Locks installed	✓	OK

MW's marked & identifiable	✓	Yes
<b>General Site Condition</b>		
Trees & brush cleared off security fence	✓	WORK IN PROGRESS
Perimeter security fence intact & free of damage	✓	OK
Site access driveway inspected	✓	PLOWED SNOW
Security access gates function able	✓	OK
Site gate signage intact	✓	OK
Interior & exterior of utility storage shed inspected for damage & secure with locks	✓	Yes
Fire extinguisher serviceable, inspected, and inspection recorded	✓	Yes
Spill control material inspected & adequate	✓	STOCKED
PPE available and utilized as required	✓	STOCKED
Emergency contact information posted within shed	✓	Yes

Additional remarks (use separate sheet is required)

MONTHLY well levels, site inspection, Pump 10,000 gal. To City of Oswego. Plowed site DRIVE App. 12" new snow

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# O'BRIEN & GERE

PAS Oswego  
Oswego, NY

## Site Inspection Checklist

Date 2-9-11

Time 7:45

Field Technician MARTIN KOENIGKE

Weather Conditions P-Sunny 8°

Inspection Features	Check √	Remarks
<b>Land Cap</b>		
Signs of burrowing vermin	✓	SNOW COVERED
Land cap irregularities (note anomaly)	✓	" "
French drainage system clear and function able	✓	OK
Concrete trough clear and function able	✓	OK
<b>Leachate Discharge System</b>		
City of Oswego sanitary discharge valve positioned "Open"	✓	Yes
Discharge Pump inspected & operational	✓	Yes
Discharge pump oil level verified prior to use.	✓	Yes
Discharge pump drained of residual water (drained upon completion of use)	✓	Yes
Heat trace system operational & verified in the "ON" position (during wintertime periods)	✓	ON
Flow totalizer operational. Flow readings recorded onto "Leachate Discharge Form"	✓	Yes
<b>Leachate Collection System</b>		
Leachate holding tank visually inspected for structural integrity	✓	OK
Leachate holding tank metal roof inspected for structural integrity	✓	OK
Leachate tank access doors locked (post pumpout)	✓	Yes
Pump power panel(s) secured	✓	Yes
<b>Monitoring Wells (MW)</b>		
Locks installed	✓	OK

2-9-11

MW's marked & identifiable	✓	Yes
<b>General Site Condition</b>		
Trees & brush cleared off security fence	✓	
Perimeter security fence intact & free of damage	✓	OK
Site access driveway inspected	✓	SNOW COUNED
Security access gates function able	✓	OK
Site gate signage intact	✓	OK
Interior & exterior of utility storage shed inspected for damage & secure with locks	✓	yes
Fire extinguisher serviceable, inspected, and inspection recorded	✓	NEED INS. NEXT MONTH
Spill control material inspected & adequate	✓	STOCKED
PPE available and utilized as required	✓	STOCKED
Emergency contact information posted within shed	✓	Yes

Additional remarks (use separate sheet is required)

Quarterly well Levels, Pumped 10,010 gallons  
Leachate To City of Oswego



# O'BRIEN & GERE

PAS Oswego  
Oswego, NY

## Site Inspection Checklist

Date 3-2-11

Time 7:30

Field Technician MARTIN KOENNECKE

Weather Conditions WINDY, SNOW SQUALS <sup>28°</sup>

Inspection Features	Check ✓	Remarks
<b>Land Cap</b>		
Signs of burrowing vermin	✓	NONE VISIBLE
Land cap irregularities (note anomaly)	✓	OK SNOW COVERED
French drainage system clear and function able	✓	SNOW COVERED
Concrete trough clear and function able	✓	" "
<b>Leachate Discharge System</b>		
City of Oswego sanitary discharge valve positioned "Open"	✓	Yes
Discharge Pump inspected & operational	✓	Yes
Discharge pump oil level verified prior to use.	✓	Yes
Discharge pump drained of residual water (drained upon completion of use)	✓	Yes
Heat trace system operational & verified in the "ON" position (during wintertime periods)	✓	ON
Flow totalizer operational. Flow readings recorded onto "Leachate Discharge Form"	✓	Yes
<b>Leachate Collection System</b>		
Leachate holding tank visually inspected for structural integrity	✓	OK
Leachate holding tank metal roof inspected for structural integrity	✓	OK
Leachate tank access doors locked (post pumpout)	✓	Yes
Pump power panel(s) secured	✓	Yes
<b>Monitoring Wells (MW)</b>		
Locks installed	✓	OK

3-2-11

MW's marked & identifiable	✓	OK
<b>General Site Condition</b>		
Trees & brush cleared off security fence	✓	WORK IN PROGRESS
Perimeter security fence intact & free of damage	✓	OK
Site access driveway inspected	✓	OK PLOW SNOW
Security access gates function able	✓	OK
Site gate signage intact	✓	OK
Interior & exterior of utility storage shed inspected for damage & secure with locks	✓	YES
Fire extinguisher serviceable, inspected, and inspection recorded	✓	OK
Spill control material inspected & adequate	✓	STOCKED
PPE available and utilized as required	✓	STOCKED
Emergency contact information posted within shed	✓	YES

Additional remarks (use separate sheet is required)

MONTHLY well Levels Pump To Leachate TANK  
 DISCHARGES 10,000 gallons, semi ANNUAL TANK SAMPLES  
 TAKEN 12.15.





O'BRIEN & GERE

PAS Oswego  
Oswego, NY

Site Inspection Checklist

Date 3-30-11 Orpky

Time 8:00am

Field Technician MARTIN KOENIGKE

Weather Conditions P-Sunny 45°

Inspection Features	Check ✓	Remarks (Fence MAINTIANCE)
<b>Land Cap</b>		
Signs of burrowing vermin	✓	NONE VISABLE
Land cap irregularities (note anomaly)	✓	OK
French drainage system clear and function able	✓	OK
Concrete trough clear and function able	✓	WINTER DEBRIS
<b>Leachate Discharge System</b>		
City of Oswego sanitary discharge valve positioned "Open"	✓	Yes
Discharge Pump inspected & operational	✓	Yes
Discharge pump oil level verified prior to use.	✓	Yes
Discharge pump drained of residual water (drained upon completion of use)	✓	Yes
Heat trace system operational & verified in the "ON" position (during wintertime periods)	✓	OK
Flow totalizer operational. Flow readings recorded onto "Leachate Discharge Form"	✓	Yes
<b>Leachate Collection System</b>		
Leachate holding tank visually inspected for structural integrity	✓	OK
Leachate holding tank metal roof inspected for structural integrity	✓	OK
Leachate tank access doors locked (post pumpout)	✓	Yes
Pump power panel(s) secured	✓	Yes
<b>Monitoring Wells (MW)</b>		
Locks installed	✓	OK

MW's marked & identifiable	✓	OK
<b>General Site Condition</b>		
Trees & brush cleared off security fence	✓	WORK IN PROGRESS
Perimeter security fence intact & free of damage	✓	AREA IN SWAMP NEEDS REPAIR
Site access driveway inspected	✓	OK
Security access gates function able	✓	OK
Site gate signage intact	✓	OK
Interior & exterior of utility storage shed inspected for damage & secure with locks	✓	YES
Fire extinguisher serviceable, inspected, and inspection recorded	✓	OK
Spill control material inspected & adequate	✓	STOCKED
PPE available and utilized as required	✓	STOCKED
Emergency contact information posted within shed	✓	YES

Additional remarks (use separate sheet is required)

MAINTENANCE ON FENCE BRUSH  
 WORKED ON CLEARING BRUSH ON PERIMETER FENCE  
 CUT UP TREE, CLEARED LIMBS OFF FENCE ON NORTH EAST  
 SECTION OF FENCE.

# O'BRIEN & GERE

## PAS Site Oswego, New York

### Leachate Discharge Form

Date: 1-5-11

Time: 9:00

Field Technician MARTIN KOENNECKE

Weather Conditions P-Sunny 26°

Well Pump	Pre-Discharge Well Pumping				
	Pump Start Time	Pump Stop Time	Tank Elevation	Flow Rate (est)	Gallons Pumped (est)
LCW-1	11:00	12:20	7.5" - START	36.5" = 80 min = 139 GPM 11,132 gal ÷ 80 min = 139 GPM.	139 GPM
LCW-2	11:00	12:20	44" - STOP		
LCW-3	NOT PUMPED				
LCW-4	11:00	12:20	AFTER PUMP OUT - 11.5"		
	Total				

Discharge #	Leachate Discharge Pumping (Monthly)						
	Start Time	Stop Time	pH	Temp	Totalizer Flow Total (Start)	Totalizer Flow Total (End)	Gallons Discharge
Discharge #1	12:45	14:42	6.78	45°	60,000	70,000	10,000
Discharge #2							
Total	10000 gal ÷ 120 min = 83.4 GPM				32.5" = 9912.5 gal		

	Leachate Discharge Sampling (Semi-Annually)					
	Date	Sample Location	Sample Volume	Sample Time	pH	Temperature
Sample #1						
Sample #2 (if required)						

Pump - 8" VAC, 0-PSI Discharge

(STARTED 12:45 - PRIMED AT 12:43)  
PUMP

DISCHARGE PUMP - 5200 GAL. in 60 min = 86.6 GPM



# O'BRIEN & GERE

## PAS Site Oswego, New York

### Leachate Discharge Form

Date: 2-9-11

Time: 9:45

Field Technician MARTIN Kocemvicka

Weather Conditions P-Sunny 8°

Well Pump	<i>Pre-Discharge Well Pumping</i>				
	Pump Start Time	Pump Stop Time	Tank Elevation	Flow Rate (est)	Gallons Pumped (est)
LCW-1	9:45	10:45		} = 165 GPM	
LCW-2	9:45	10:45			
LCW-3	NOT PUMPED				
LCW-4	9:45	10:45	START 11.5" STOP 43"	After pump out TANK END	10.5"

Total 32.5" x 3.05 = 99.12

Discharge #	<i>Leachate Discharge Pumping (Monthly)</i>						
	Start Time	Stop Time	pH	Temp	Totalizer Flow Total (Start)	Totalizer Flow Total (End)	Gallons Discharge
Discharge #1	11:00	13:00	6.8	42°	70,000	80,010	10,010
Discharge #2							
Total							10,010

	<i>Leachate Discharge Sampling (Semi-Annually)</i>					
	Date	Sample Location	Sample Volume	Sample Time	pH	Temperature
Sample #1						
Sample #2 (if required)						



# O'BRIEN & GERE

## PAS Site Oswego, New York

### Leachate Discharge Form

Date: 3-2-11

Time: 7:30

Field Technician MARTIN KOENNECKE

Weather Conditions windy, 28° snow squalls

Well Pump	Pre-Discharge Well Pumping				
	Pump Start Time	Pump Stop Time	Tank Elevation	Flow Rate (est)	Gallons Pumped (est)
LCW-1	9:40	10:40	10,000 ÷ 60 min = 166 GPM	}	
LCW-2	9:40	10:40			
LCW-3	NOT PUMPED				
LCW-4	9:40	10:40			
<p>START- 10.5" STOP 43" AFTER Pump OUT - 10.25" PUMPED OUT 32.95" Total</p>					10,000

Discharge #	Leachate Discharge Pumping (Monthly)						
	Start Time	Stop Time	pH	Temp	Totalizer Flow Total (Start)	Totalizer Flow Total (End)	Gallons Discharge
Discharge #1	10:50	12:50	6.4	42°	80,010	90,010	10,000
Discharge #2							
Total							

	Leachate Discharge Sampling (Semi-Annually)					
	Date	Sample Location	Sample Volume	Sample Time	pH	Temperature
Sample #1	3-2-11	Effluent	comp.	12:15	6.4	42°
Sample #2 (if required)						

*ATTACHMENT C-3*

*CITY OF OSWEGO DISCHARGE REPORT  
1<sup>ST</sup> QUARTER REPORT*



*de maximis, inc.*

2975 Bee Ridge Road  
Suite C  
Sarasota, FL 34239  
(941) 926-7929

April 26, 2011

Mr. Anthony A. Leotta, P.E.  
City Engineer  
City Hall  
Oswego, New York 13126

Re: Quarterly Discharge Report – 1<sup>st</sup> Quarter 2011  
Pollution Abatement Services Site – Oswego, New York  
City of Oswego Wastewater Discharge Permit 6-2010-13

Dear Mr. Leotta:

This quarterly report is submitted in accordance with the City of Oswego Wastewater Discharge Permit 6-2010-13 (Permit) for discharge of leachate from the Pollution Abatement Services (PAS) Site into the City of Oswego's Eastside Wastewater Treatment Facility. This is the second quarterly report submitted and covers the period from January 2011 through March 2011.

The total gallons of leachate discharged during the first quarter of 2011 totals 30,010 gallons. The amount of leachate discharged during each monthly removal event is summarized in Table 1. A completed Leachate Discharge Form is attached documenting each leachate removal event in Attachment I. The flow totalizer readings documenting quantities discharged, as well as date and time of each discharge event is provided on this form. Measurements for pH and temperature are also recorded in the Leachate Discharge Form.

We performed the first semi-annual leachate sampling event for 2011 during the March 2, 2011 discharge event in accordance with the requirements of the Permit. The sample was submitted to Life Science Laboratories in E. Syracuse, New York. The leachate sampling results are summarized in Table 1. The Life Sciences lab report is provided in Attachment II.

If you need additional information please call me at (941) 926-7929.

Sincerely,

Mark Valentine

Attachments

CC: Michael Coffey – City of Oswego w/attach  
PAS Oswego Site Management Committee w/attach

**TABLE 1 - PAS OSWEGO SITE QUARTERLY REPORT FOR CITY OF OSWEGO (April 2011)  
LEACHATE DISCHARGE TO OSWEGO EASTSIDE WASTEWATER TREATMENT FACILITY**

4Q 2010		1Q 2011		2Q 2011		3Q 2011		4Q 2011	
Date Discharged	Gallons	Date Discharged	Gallons	Date Discharged	Gallons	Date Discharged	Gallons	Date Discharged	Gallons
10/28/2010	20,000	1/5/2011	10,000						
11/2/2010	20,000	2/9/2011	10,010						
12/6/2010	20,000	3/2/2011	10,000						
<b>Total Discharged</b>	60,000		30,010		0		0		0
<b>Date Sampled</b>	10/28/11								
<b>Analytes</b>	mg/L		mg/L		mg/L		mg/L		mg/L
Cyanide	ND		ND		ND		ND		
Cadmium	ND		ND		ND		ND		
Chromium (total)	0.015		0.014		0.014		0.011		
Copper	ND		ND		ND		ND		
Lead	ND		ND		0.65		ND		
Nickel	0.58		ND		ND		ND		
Silver	ND		ND		ND		ND		
Zinc	ND		ND		ND		ND		
Mercury	ND		ND		ND		ND		
BOD 5	13		32						
TSS	9		93						
Phenolics	0.14		0.11						
pH	7.15		6.4						

\* Life Sciences lab results for this sampling event are included in Attachment II.



**ATTACHMENT I**

**LEACHATE DISCHARGE FORMS**



# O'BRIEN & GERE

PAS Site  
Oswego, New York

## Leachate Discharge Form

Date: 1-5-11

Time: 9:00

Field Technician MARTIN KOENNECKE

Weather Conditions P-Sunny 26°

Well Pump	Pre-Discharge Well Pumping				
	Pump Start Time	Pump Stop Time	Tank Elevation	Flow Rate (est)	Gallons Pumped (est)
LCW-1	11:00	12:20	7.5" - START	36.5" = 11,132 gal	80 min = 139 GPM
LCW-2	11:00	12:20	44" - STOP		
LCW-3	NOT PUMPED				
LCW-4	11:00	12:20	After Pump out - 11.5"		
	Total				

Discharge #	Leachate Discharge Pumping (Monthly)						
	Start Time	Stop Time	pH	Temp	Totalizer Flow Total (Start)	Totalizer Flow Total (End)	Gallons Discharge
Discharge #1	12:45	14:42	6.78	45°	60,000	70,000	10,000
Discharge #2							
Total	10000 gal ÷ 100 min = 88.4 GPM				32.5" = 9912.5 gal		

	Leachate Discharge Sampling (Semi-Annually)					
	Date	Sample Location	Sample Volume	Sample Time	pH	Temperature
Sample #1						
Sample #2 (if required)						

Pump - 8" VAC, 0-PSI Discharge (STARTED 12:45 - PRIMED AT 12:43) Pump

Discharge Pump - 5200 GAL. in 60 min = 86.6 GPM



O'BRIEN & GERE

PAS Site  
Oswego, New York

Leachate Discharge Form

Date: 2-9-11

Time: 7:45

Field Technician MARTIN KOZMICKI

Weather Conditions P-Sunny 8°

Pre-Discharge Well Pumping					
Well Pump	Pump Start Time	Pump Stop Time	Tank Elevation	Flow Rate (est)	Gallons Pumped (est)
LCW-1	9:45	10:45		} = 165 GPM	
LCW-2	9:45	10:45			
LCW-3	NOT PUMPED				
LCW-4	9:45	10:45 START 11.5" STOP 43"		AFTER PUMP OUT TANK END	10.5"
Total					32.5" x 305 = 9912

Leachate Discharge Pumping (Monthly)							
Discharge #	Start Time	Stop Time	pH	Temp	Totalizer Flow Total (Start)	Totalizer Flow Total (End)	Gallons Discharge
Discharge #1	11:00	13:00	6.8	42°	70,000	80,010	10,010
Discharge #2							
Total							10,010

Leachate Discharge Sampling (Semi-Annually)						
	Date	Sample Location	Sample Volume	Sample Time	pH	Temperature
Sample #1						
Sample #2 (if required)						



# O'BRIEN & GERE

## PAS Site Oswego, New York

### Leachate Discharge Form

Date: 3-2-11

Time: 7:30

Field Technician MARTIN KOENNECKE

Weather Conditions windy, 28° SNOW SQUALS

Well Pump	Pre-Discharge Well Pumping				
	Pump Start Time	Pump Stop Time	Tank Elevation	Flow Rate (est)	Gallons Pumped (est)
LCW-1	9:40	10:40	10,000 ÷ 60 min = 166 GPM		
LCW-2	9:40	10:40			
LCW-3	NOT PUMPED				
LCW-4	9:40	10:40			
<p>pumped out 32.75" Total</p> <p>START- 10.5" STOP 43" After Pump out - 10.25"</p>					10,000

Discharge #	Leachate Discharge Pumping (Monthly)						
	Start Time	Stop Time	pH	Temp	Totalizer Flow Total (Start)	Totalizer Flow Total (End)	Gallons Discharge
Discharge #1	10:50	12:50	6.4	42°	80,010	90,010	19,000
Discharge #2							
Total							

	Leachate Discharge Sampling (Semi-Annually)					
	Date	Sample Location	Sample Volume	Sample Time	pH	Temperature
Sample #1	3-2-11	Effluent	comp.	12:15	6.4	42°
Sample #2 (if required)						

**ATTACHMENT II**

**LEACHATE SAMPLING LAB REPORT**



**Life Science Laboratories, Inc.**

5854 Butternut Drive  
East Syracuse, NY 13057

(315) 445-1105

Wednesday, March 16, 2011

Kevin Stone  
O'Brien & Gere Inc. of North America  
555 E Genesee Street  
Fayetteville, NY 13066

TEL: 315-637-2234

Project: PAS OSWEGO SEMI-ANNUAL EFFLUENT

RE: Analytical Results

Order No.: K1103012

Dear Kevin Stone:

Life Science Laboratories, Inc. received 1 sample(s) on 3/2/2011 for the analyses presented in the following report. Sample results relate only to the samples as received by the laboratory.

Very truly yours,  
Life Science Laboratories, Inc.

A handwritten signature in cursive script that reads "Pamela J. Titus, p.m." The signature is written in black ink and is positioned above the printed name and title.

Pamela J. Titus  
Project Manager



Life Science Laboratories, Inc.

5854 Butternut Drive

East Syracuse, NY 13057

(315) 445-1105

# Analytical Results

StateCertNo: 10248

CLIENT O'Brien & Gere Inc. of North America

Lab ID: K1103012-001A

Project: PAS Oswego Semi-Annual Effluent

Client Sample ID: *Effluent*

W Order: K1103012

Collection Date: 03/02/11 12:15

Matrix: WATER

Date Received: 03/02/11 14:05

Analyte	Result	Qual	PQL Units	DF	Date Analyzed
<b>BIOCHEMICAL OXYGEN DEMAND (BOD5)</b>			<b>SM 18-20 5210 B</b>		
Biochemical oxygen demand (BOD5)	32		5.0 mg/L	1	03/04/11 9:15
NOTES: As per NELAC regulation disclosure of the following condition is required; The result of the laboratory control sample was less than the established limit.					
<b>LABORATORY (PH)</b>			<b>SM 18-20 4500-H B</b>		
pH	6.40		1.00 pH Units	1	03/02/11
NOTES: Calculated value based on information provided by the client.					
<b>RESIDUE-NON-FILTERABLE (TSS)</b>			<b>SM 18-20 2540 D</b>		
Residue-non-filterable (TSS)	93		5.0 mg/L	1	03/08/11 12:00

- Qualifiers:
- \* Value exceeds Maximum Contaminant Level
  - E Value exceeds the instrument calibration range
  - J Analyte detected below the PQL
  - P Prim./Conf. column %D or RPD exceeds limit
  - B Analyte detected in the associated Method Blank
  - H Holding times for preparation or analysis exceeded
  - ND Not Detected at the Practical Quantitation Limit (PQL)
  - S Spike Recovery outside accepted recovery limits



Life Science Laboratories, Inc.

5854 Butternut Drive

East Syracuse, NY 13057

(315) 445-1105

# Analytical Results

StateCertNo: 10248

CLIENT O'Brien & Gere Inc. of North America

Lab ID: K1103012-001B

Project: PAS Oswego Semi-Annual Effluent

Client Sample ID: *Effluent*

W Order: K1103012

Collection Date: 03/02/11 12:15

Matrix: WATER

Date Received: 03/02/11 14:05

Analyte	Result	Qual	PQL Units	DF	Date Analyzed
CYANIDE, TOTAL			EPA 335.4	(E335.4)	
Cyanide, Total	ND		0.010 mg/L	1	03/08/11

Qualifiers:

- \* Value exceeds Maximum Contaminant Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits





Life Science Laboratories, Inc.

5854 Butternut Drive

East Syracuse, NY 13057

(315) 445-1105

# Analytical Results

State Cert No: 10248

CLIENT O'Brien & Gere Inc. of North America  
Project: PAS Oswego Semi-Annual Effluent  
W Order: K1103012  
Matrix: WATER

Lab ID: K1103012-001C  
Client Sample ID: *Effluent*  
Collection Date: 03/02/11 12:15  
Date Received: 03/02/11 14:05

Analyte	Result	Qual	PQL Units	DF	Date Analyzed
PHENOLICS, TOTAL RECOVERABLE			EPA 420.1	(E420.1)	
Phenolics, Total Recoverable	0.11		0.050 mg/L	10	03/10/11

- Qualifiers:
- \* Value exceeds Maximum Contaminant Level
  - E Value exceeds the instrument calibration range
  - J Analyte detected below the PQL
  - P Prim./Conf. column %D or RPD exceeds limit
  - B Analyte detected in the associated Method Blank
  - H Holding times for preparation or analysis exceeded
  - ND Not Detected at the Practical Quantitation Limit (PQL)
  - S Spike Recovery outside accepted recovery limits



Life Science Laboratories, Inc.  
 5854 Butternut Drive  
 East Syracuse, NY 13057 (315) 445-1105

# Analytical Results

StateCertNo: 10248

CLIENT: O'Brien & Gere Inc. of North America  
 Project: PAS Oswego Semi-Annual Effluent  
 W Order: K1103012  
 Matrix: WATER

Lab ID: K1103012-001D  
 Client Sample ID: Effluent  
 Collection Date: 03/02/11 12:15  
 Date Received: 03/02/11 14:05

Analyte	Result	Qual	PQL Units	DF	Date Analyzed
<b>MERCURY</b>					
Mercury	ND		EPA 245.1 0.00020 mg/L	(E245.1) 1	03/07/11 17:09
<b>TOTAL METALS BY ICP</b>					
			EPA 200.7	(E200.2)	
Cadmium	ND		0.010 mg/L	1	03/04/11 16:41
Chromium	0.014		0.010 mg/L	1	03/04/11 16:41
Copper	0.011		0.010 mg/L	1	03/04/11 16:41
Lead	ND		0.010 mg/L	1	03/04/11 16:41
Nickel	0.65		0.010 mg/L	1	03/04/11 16:41
Silver	ND		0.010 mg/L	1	03/04/11 16:41
Zinc	ND		0.020 mg/L	1	03/04/11 16:41

Qualifiers: \* Value exceeds Maximum Contaminant Level  
 E Value exceeds the instrument calibration range  
 J Analyte detected below the PQL  
 P Prim./Conf. column %D or RPD exceeds limit  
 B Analyte detected in the associated Method Blank  
 H Holding times for preparation or analysis exceeded  
 ND Not Detected at the Practical Quantitation Limit (PQL)  
 S Spike Recovery outside accepted recovery limits



Life Science Laboratories, Inc.

Sample Receipt Checklist

Client Name: OGINA PAS

Date and Time Received: 3/2/2011 2:05:00 PM

Work Order Number: K1103012

Received by: gis

Checklist completed by: Carol Jitus 3/2/11  
Initials Date

Reviewed by: \_\_\_\_\_  
Initials Date

Delivery Method: Hand Delivered

- Shipping container/cooler in good condition? Yes  No  Not Present
- Custody seals intact on shipping container/cooler? Yes  No  Not Present
- Custody seals intact on sample bottles? Yes  No  Not Applicable
- Chain of custody present? Yes  No
- Chain of custody signed when relinquished and received? Yes  No
- Chain of custody agrees with sample labels? Yes  No
- Samples in proper container/bottle? Yes  No
- Sample containers intact? Yes  No
- Sufficient sample volume for indicated test? Yes  No
- All samples received within holding time? Yes  No
- Container/Temp Blank temperature in compliance? Yes  No
- Water - VOA vials have zero headspace? Yes  No  No VOA vials submitted
- Water - pH acceptable upon receipt? Yes  No  Not Applicable

pH	Preservative	pH Acceptable		
>12	NaOH	Yes <input checked="" type="checkbox"/>	N <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
<2	HNO3	Yes <input checked="" type="checkbox"/>	N <input type="checkbox"/>	NA <input type="checkbox"/>
<2	H2SO4	Yes <input checked="" type="checkbox"/>	N <input type="checkbox"/>	NA <input type="checkbox"/>
<2	1:1 HCL	Yes <input type="checkbox"/>	N <input type="checkbox"/>	NA <input checked="" type="checkbox"/>
5-9	Pest/PCBs (608/8081)	Yes <input type="checkbox"/>	N <input type="checkbox"/>	NA <input checked="" type="checkbox"/>

Sample ID: ok (PJD) 3/2/11

Volume of Preservative added in Lab.

Comments:

Corrective Action: