EPS
ENVIRONMENTAL PLANNING SPECIALISTS, INC.
ENVIRONMENTAL CONSULTANTS

1050 Crown Pointe Pkwy, Ste 550, Atlanta, GA 30338

June 29, 2017

Mr. Allen Rainey
Environmental Specialist III
Solid and Hazardous Waste Program
Florida Department of Environmental Protection, Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Re: 26th Semi-Annual Water Quality Monitoring Event - Notice of Exceedances
J.E.D. Solid Waste Management Facility (JED Facility)
Omni Waste of Osceola County, LLC
Permit No. SO49-0199726-022
WACS Facility ID: 89544

Dear Mr. Rainey:

The purpose of this letter is to inform the Florida Department of Environmental Protection (FDEP) that monitoring parameters exceeded the Department's water quality standards in some of the groundwater monitoring wells at the JED Facility during the 26th semi-annual water quality monitoring event performed in May 2017. In accordance with 62-701.510(6)(a), Florida Administrative Code (FAC), the Department is being notified of these findings within 14 days of receipt of the analytical laboratory results (the final lab report received via email on June 15, 2017). A brief summary of the exceeded monitoring parameters is presented below and results provided on the attached Table.

Ammonia - ammonia was reported above the groundwater cleanup target level (GCTL) of 2.8 mg/L in nineteen (19) of the shallow groundwater monitoring wells (i.e., MW-1A, 2A, 3A, 4A, 5A, 6A, 7A, 8A, 9A, 10A, 11A, 16AR, 22AR, 23A, 27A, 29A, CW-1A, CW-2A and CW-3A) and seven (7) of the intermediate monitoring wells (MW-1B, 3B, 4B, 5B, 7B, 10B and 23B). Ammonia has been detected in most of these wells during previous sampling events. Based on this historical data, these wells will not be re-sampled for ammonia and the reported concentrations will be considered as representing current conditions.

Benzene – benzene was reported above the GCTL of 1µg/L in eleven (11) of the shallow groundwater monitoring wells (MW-1A, 3A, 4A, 6A, 8A, 9A, 10A, 11A, 12A, 13A and MW-16AR) and one (1) of the intermediate wells (MW-10B). Benzene has been detected

above the GCTL in most of these wells during previous monitoring events at similar concentrations. Based on this historical data, these wells will not be re-sampled and the reported concentrations will be considered as representing current conditions.

1,2-Dibromo-3-chloropropane – 1,2-Dibromo-3-chloropropane was reported above the GCTL of 0.2 μg/L in monitoring well MW-16BR (0.31 μg/L). This constituent has not been detected in MW-16BR previously and has only been detected once before in a site well (MW-22AR during the 25th sampling event but was not detected in MW-22AR this event); based on the sporadic detections it is likely this constituent is a laboratory artifact. MW-16BR will not be re-sampled.

Arsenic – arsenic was reported above the GCTL of 10 μg/L in compliance monitoring well CW-1A (120 μg/L). Arsenic has been detected in this well during previous events and, based upon the historical site data, is likely not related to site operations. This well will not be re-sampled for arsenic.

Chloride – chloride was reported above the GCTL of 250 mg/L in monitoring well MW-1A (590 mg/L), MW-16AR (360 mg/L), MW-23A (600 mg/L), and CW-2A (710 mg/L). These wells will not be re-sampled for chloride and the reported concentration will be considered as representing current conditions.

Iron –iron was detected above the GCTL of 300 μg/L in all but four monitoring wells sampled this event with concentrations ranging from 360 μg/L to 48,000 μg/L. The concentrations are consistent with previous results and will not be re-sampled and the reported values considered representative of current conditions.

Lead – Lead was detected above the PDWS of 15 μg/L in A-zone monitoring wells MW-22AR (58 μg/L), MW-24A (46 μg/L), and MW-25A (32 μg/L); and B-zone monitoring wells MW-22BR (39 μg/L), MW-24B (46 μg/L), MW-25B (45 μg/L) and MW-31B (18 μg/L). The elevated lead detection in MW-31B is likely due to sample turbidity (107 NTU). Due to the high turbidity, a field-filtered sample was collected concurrently with the unfiltered sample and analyzed for dissolved metals. The filtered sample showed no detection of lead at an MDL of 1.3 μg/L, which suggests the high result in the unfiltered sample is due to turbidity.

The other wells where lead was detected above the PDWS was unique to this event. Due to the unusually high detections in MW-22AR/BR, MW-24A/B and MW-25-A/B, EPS requested that AEL re-analyze these samples to confirm the results. AEL already disposed of the preserved sample bottles and consequently had to use a sample from the unpreserved sample bottles

submitted. The re-analysis results show lead concentrations were non-detect in MW-22AR/BR, MW-24A/B and MW-25-A and above the PQL but below the PDWS in MW-25B (2.4 µg/L) [it is of note that MW-25B had a turbidity of 72 NTU]. While not a direct comparison due to the use of an unpreserved sample, nonetheless it is likely that the initial elevated lead detections in MW-22AR/BR, MW-24A/B and MW-25-A/B are a result of laboratory bias and not indicative of site conditions. Please see the email from AEL attached to this letter. The site wells will not be re-sampled for lead.

Sodium – sodium was reported above the GCTL of 160 mg/L in monitoring well MW-1A (290 mg/L) and CW-3A (200 mg/L). These wells will not be re-sampled for sodium and the reported concentration will be considered as representing current conditions.

Total dissolved solids (TDS) – TDS concentrations were reported above the GCTL of 500 mg/L in ten (10) shallow groundwater monitoring wells (MW-1A, 2A, 3A, 4A, 8A, 16AR, 25A, CW-1A, CW-2A and CW-3A) and nine (9) intermediate monitoring wells (MW-1B, 2B, 3B, 4B, 5B, 7B, 8B, 10B and 23B). The reported concentrations will be considered as representing current conditions.

If you have any questions or need additional information, please contact the undersigned at (813) 943-8633 or by email jterry@envplanning.com.

Sincerely,

Joe Terry

Joe Terry
Project Engineer
EPS

cc: K. Wills, WCI
B. Gray, WCI
G. DePradine, FDEP

Table 3

SUMMARY OF GROUNDWATER ANALYTICAL DATA
26th SEMI-ANNUAL WATER QUALITY MONITORING EVENT
J.E.D. SOLID WASTE MANAGEMENT FACILITY

Well ID	1,2-Dibromo-3-chloropropane		Acetone		Benzene		Toluene		Arsenic		Barium		Beryllium		Cadmium		Chromium		Cobalt		Copper		Iron		Lead		Nickel		Sodium		Vanadium		Zinc		Ammonia	Chloride	TDS
	PDWS (ug/L)		GCTL (ug/L)		PDWS (ug/L)		SDWS (ug/L)		GCTL (ug/L)		PDWS (ug/L)		PDWS (ug/L)		PDWS (ug/L)		PDWS (ug/L)		PDWS (ug/L)		SDWS (ug/L)		SDWS (ug/L)		PDWS (ug/L)		PDWS (ug/L)		PDWS (mg/L)		GCTL (ug/L)		SDWS (ug/L)		GCTL (mg/L)	SDWS (mg/L)	SDWS (mg/L)
	0.2		6,300		1		40		10		2,000		4		5		100		140		1,000		300		15		100		160		49		5,000		2.8	250	500
MW-1A	0.11	U	2.1	U	2.50		0.23	U	8.50	U	56		0.16	I	0.32	U	5		1.1	I	2.5	U	6,900		1.3	U	5.8	I	290		25		8.5	I	9.5	590	1,200
MW-1B	0.11	U	2.1	U	0.70	I	0.23	U	8.50	U	51		0.65		0.41	I	1.1		9		2.5	U	29,000		1.3	U	6.7		160		15		2	U	4.4	190	1,100
MW-2A	0.11	U	4.9	I	0.16	U	0.23	U	8.50	U	58		0.18	I	0.35	I	2.7		3.1	I	2.5	U	14,000		1.3	U	6.3	I	63		5.1		2.5	I	6.9	140	650
MW-2B	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	45		0.94		0.56	I	0.50	U	14		2.5	U	45,000		1.3	U	6.6		62		4.2		2	U	1.1	120	860
MW-3A	0.11	U	2.1	U	4.40		0.23	U	8.50	U	67		0.13	U	0.34	I	2.7		1.6	I	2.5	U	4,100		1.3	U	4.5	I	26		6.8		10		11	44	1,400
MW-3B	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	38		1.9		0.44	I	0.8	I	3.8	I	2.5	U	10,000		1.3	U	1.4	I	35		5.1		16		3.7	98	1,300
MW-4A	0.11	U	2.1	U	1.60		0.23	U	8.50	U	43		0.13	U	0.33	I	3.0		0.6	U	2.5	U	6,300		1.3	U	1.3	I	43		4.3		8.1	I	18	40	760
MW-4B	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	37		0.60		0.46	I	2.2		0.6	U	2.5	U	280		1.3	U	1.1	U	57		7.5		10		12	97	1,500
MW-5A	0.11	U	2.1	U	1.00		0.23	U	8.50	U	5		0.13	U	0.32	U	2.6		0.6	U	2.5	U	300		1.3	U	1.1	U	12		2.6		8.6	I	5.9	35	220
MW-5B	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	46		0.43		0.41	I	1.6		0.6	U	2.5	U	260		1.3	U	1.1	U	76		4.6		8.4	I	5.4	99	1,700
MW-6A	0.11	U	2.1	U	4.4		0.23	U	8.50	U	6.6		0.13	U	0.32	U	1.2		0.6	U	2.5	U	13,000		1.3	U	1.9	I	17		4.0		4.7	I	3.9	41	140
MW-6B	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	42		0.33		0.32	U	0.5	I	0.6	U	2.5	U	1,300		1.3	U	1.5	I	9.8		1.7		9.7	I	0.25	29	67
MW-7A	0.11	U	18.0		0.16	U	0.23	U	8.50	U	26		0.13	U	0.32	U	1.0		2.80	I	2.5	U	21,000		1.3	U	2.7	I	20		1.9		2	U	16	76	150
MW-7B	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	34		1.40		0.32	U	0.6	I	5.7		2.5	U	30,000		1.3	U	7.2		25		3.5		2	U	3.6	31	670
MW-8A	0.11	U	2.1	U	4.1		0.23	U	8.50	U	39		0.14	I	0.40	I	2.1		3.3	I	2.5	U	19,000		1.3	U	2.5	I	7.5		3.3		2	U	6.3	0.91	1,500
MW-8B	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	67		0.86				0.50	U	8.3		2.5	U	48,000		1.3	U	5.4	I	38		4.9		2	U	0.92	41	1,100
MW-9A	0.11	U	6.6		9.4		0.23	U	8.50	U	9		0.13	U	0.32	U	3.60		0.60	U	2.5	U	1,200		1.3	U	1.1	U	20		5.2		21		3.8	16	200
MW-9B	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	41		1.1		0.32	U	2.0		3.1	I	2.5	U	9,400		1.3	U	1.1	U	18		3.6		7.0	I	1.3	37	390
MW-10A	0.11	U	2.1	U	5.2		0.23	U	8.50	U	54		0.13	U	0.32	U	0.94	I	1.2	I	2.5	U	6,500		1.3	U	1.1	U	28		2.6		6.8	I	13	28	380
MW-10B	0.11	U	2.1	U	8.1		0.23	U	8.50	U	41		2.3		0.32	U	0.93	I	9.0		2.5	U	13,000		1.3	U	1.3	I	36		4.4		3.5	I	9.2	39	900
MW-11A	0.11	U	2.1	U	1.5		0.23	U	8.50	U	19		0.25	I	0.32	U	5.60		0.94	I	2.5	U	13,000		1.3	U	2.8	I	15		5.6		2	U	3.3	14	150
MW-11B	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	23		0.13	U	0.32	U	2.5		0.60	U	2.5	U	360		1.3	U	1.1	U	11		3.6		12		0.03	11	60
MW-12A	0.11	U	2.1	U	6.1		0.23	U	8.50	U	21		0.13	U	0.32	U	1.90		0.82	I	2.5	U	28,000		1.3	U	2.0	I	26		4.9		2	U	1.9	62	310
MW-12B	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	57		0.13	U	0.32	U	1.00		0.60	U	2.5	U	730		1.3	U	1.1	U	7.6		1.4	I	11		0.09	15	60
MW-13A	0.11	U	2.1	U	3.2		0.23	U	8.50	U	15		0.13	U	0.32	U	2.1		0.60	U	2.5	U	4,800		4.5	I	1.1	U	58		6.6		4.7	I	1.7	120	370
MW-13B	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	120		0.13	U	0.32	U	0.79	I	0.60	U	2.5	U	1,100		6.9	I	1.1	U	10		0.94	I	7.1	I	0.12	27	74
MW-16AR	0.11	U	2.1	U	2.10		0.23	U	8.50	U	120		0.13	U	0.68		3.7		0.63	I	2.5	U	1,900		3.6	I	1.1	U	140		11		5.6	I	4.8	360	1,200
MW-16AR Duplicate	0.11	U	6.0		2.60		0.23	U	8.50	U	120		0.13	U	0.69		4.1		0.60	U	2.5	U	2,100		1.3	U	1.1	U	160		10		2	U	4.8	350	1,200
MW-16BR	0.31		2.1	U	0.16	U	0.23	U	8.50	U	24		0.13	U	0.32	U	0.9	I	0.60	U	2.5	U	1,300		9.1	I	1.1	U	6.4		1.30	I	8.8	I	0.21	16	54
MW-17AR	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	79		0.16	I	1.4		1.0		0.60	U	2.5	U	750		8.5		1.1	U	13		6.3		6.2	I	1.9	16	180
MW-17BR	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	26		0.13	U	0.32	U	1.7		0.60	U	2.5	U	630		11.0		1.1	U	15		2.3		9.1	I	0.11	26	71
MW-22AR	0.11	U	7.5		0.16	U	0.23	U	8.50	U	19		0.13	U	0.32	U	4.3		0.60	U	3.0	I	1,400		58		1.2	I	19		3.1		3.8	I	5.0	48	310
MW-22BR	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	77		0.39		0.32	U	0.5	U	3.50	I	2.5	U	13,000		39		2.9	I	29		2.1		5.5	I	0.30	76	330
MW-23A	0.11	U	2.1	U	0.86	I	0.23	U	8.50	U	8		0.13	U	0.32	U	1.7		0.60	U	2.5	U	190		1.3	U	1.1	U	21		3.2	V	7.3	I	3.0	600	320
MW-23B	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	100		0.59		0.32	U	0.9	I	0.94	I	2.5	U	3,100		1.3	U	1.1	U	82		5.8	V	6.4	I	2.9	59	600
MW-24A	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	10		0.13	U	0.32	U	1.1		0.60	U	2.5	U	440		46		1.2	I	11		0.74	I	10		0.37	47	77
MW-24B	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	7		0.13	U	0.32	U	1.2		0.60	U	2.5	U	430		46		1.6	I	4.5		1.1	I	9.9	I	0.11	14	65
MW-25A	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	140		1.20		0.34	I	0.8	I	2.5	I	4.8		19,000		32		2.4	I	64		5.4		3.4	I	2.7	250	730
MW-25B	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	91		0.36		0.52	I	6.3		0.60	U	2.7	I	1,200		45		3.0	I	11		10		9.2	I	0.20	50	150
MW-27A	0.11	U	2.1	U	0.16	U	1.10		8.50	U	9		0.13	U	0.32	U	4.5		0.60	U	2.5	U	610		6.3	I	1.1	U	10		11.0		9.6	I	2.90	14	110
MW-27B	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	31		0.13	U	0.32	U	4.1		0.60	U	3.4	I	620		10.0		1.1	U	21		4.8		8.6	I	0.08	35	110
MW-28A	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	13		0.13	U	0.32	U	9.1		1.30	I	4.4		2,200		12.0		5.4	I	11		11		11		2.7	18	140
MW-28B	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	32		0.13	U	0.32	U	1.6		0.60	U	3.7	I	1,100		10.0		1.1	U	14		2.8		9.1	I	0.10	31	91
MW-29A	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	19		0.13	U	0.32	U	2.9		0.99	I	3.2	I	3,500		10.0		1.1	U	8.7		18		7.8	I	3.0	9.7	140
MW-29B	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	75		0.22	I	0.32	U	1.2		0.60	I	3.1	I	2,300		9.3		1.1	U	21		2.7		6.8	I	0.1	U	30	160
MW-31A	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	16		0.33		0.32	U	1.3		1.3	I	3.0	I	6,400		11.0		1.3	I	13		0.73	I	7	I	1.7	27	84
MW-31B	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	75		0.37		0.32	U	9		0.8	I	5		1,900		18		1.5	I	11		13		7.3	I	0.32	23	160
MW-31B (Dissolved Metals)									8.50	U	25		0.13	U	0.32	U	0.94	I	0.6	U	3	U	1,500		1.3	U	1.1	U	12		1.5	I,V	12				
CW-1A	0.11	U	2.1	U	0.16	U	0.23	U	120		95		0.2	I	0.32	U	15		2.8	I	2.5	U	19,000		1.3	U	1.8	I	38		9.4	V	2.0	U	4.2	25	710
CW-2A	0.11	U	9.1		0.16	U	7.00		8.50	U	57		0.3		0.32	U	7		0.6	U	2.5	U	400		1.3	U	4.6	I	130		21	V	11		12	710	950
CW-3A	0.11	U	2.1	U	0.16	U	0.23	U	8.50	U	82		1.5		0.34	I	7		1.7	I	2.5	U	17,000		1.3	U	2.7	I	200		13	V	2.0	U	11	33	1,300

NOTES:

I	The Reported Value is between the Laboratory Method Detection Limit (MDL) and the Laboratory Practical Quantitation Limit (PQL).
	Detect
	Exceeds GCTL
U	Sample was analyzed for but not detected.
V	Method Blank Contamination

Due to high turbidity in MW-31B, a field filtered sample was collected in addition to an unfiltered sample for metals analysis only.

From:	Craig Myers
To:	Joe Terry
Cc:	kirk.wills@wasteconnections.com
Subject:	Re: J1704958 Final Report and SELECT File (J.E.D. Landfill - GW samples collected 5/16/17)
Date:	Thursday, June 29, 2017 1:22:55 PM

Hi Joe,

Per our discussion on the phone today, here are the results of the re-analysis of lead in ug/L:

17136-MW-22AR - 1.3 U
17136-MW-22BR - 1.3 U
17136-MW-24A - 1.3 U
17136-MW-24B - 1.3 U
17136-MW-25A - 1.3 U
17136-MW-25B - 2.4

Please note that the re-analysis was performed from containers that were improperly preserved for metals analysis. The containers that were preserved with nitric acid had already been disposed, so we took volume from the unpreserved TDS container. The samples had some color and contained small amounts of sediment. Since we no longer have the metals containers, there's no way to compare the amount of sediment found in each of the containers. As you already know, samples that contain more sediment can potentially have higher detections of metals.

Let me know if you need additional information.

Thanks,

Craig Myers
Client Services Manager
Advanced Environmental Laboratories, Inc.
6681 Southpoint Parkway
Jacksonville, FL 32216
904-363-9350 Voice
904-363-9354 Fax
Website: www.aellab.com

On 6/26/2017 2:03 PM, Joe Terry wrote:

> Craig,

Would it be possible to rerun MW-22AR, MW-22BR, MW-24A, MW-24B, MW-25A and MW-25B for lead? I just want to verify the results because the detections this event were rather high and they have always been non-detect or well below the GCTL previously.

Thanks,

Joe

From: Craig Myers [mailto:CMyers@AELLab.com]
Sent: Thursday, June 15, 2017 3:31 PM
To: kirk.wills@wasteconnections.com; Joe Terry <jterry@envplanning.com>
Subject: J1704958 Final Report and SELECT File (J.E.D. Landfill - GW samples collected 5/16/17)

Craig Myers
Client Services Manager
Advanced Environmental Laboratories, Inc.
6681 Southpoint Parkway
Jacksonville, FL 32216
904-363-9350 Voice
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Website: www.aellab.com

AEL can now run your PAH and FL-PRO water samples from a single 250ml bottle! Less time filling bottles and fewer coolers in your truck!

Did we do a great job on your last project? Or do we need to work on a few things? Let us know how we did by doing theAEL Customer Satisfaction Survey.