EPS
ENVIRONMENTAL PLANNING SPECIALISTS, INC.
ENVIRONMENTAL CONSULTANTS

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

December 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: 27th 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. 0199726-033-SO-01
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 27th semi-annual water quality monitoring event performed in November 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 December 19, 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, 12A, 13A, 22AR, 23A, 31A, 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 ten (10) of the shallow groundwater monitoring wells (MW-3A, 4A, 6A, 8A, 9A, 10A, 11A, 12A, 13A and 29A) 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.

Arsenic – arsenic was reported above the GCTL of 10 µg/L in compliance monitoring well CW-1A (140 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.

Cadmium – cadmium was reported at a concentration slightly above the GCTL of 5 µg/L in shallow monitoring well MW-17AR (5.1 µg/L). Historically, cadmium has not been detected in this, or any other site well, at concentrations exceeding the GCTL and, based upon the other constituent concentrations observed in MW-17AR, does not indicate impacts from site operations. This well will not be re-sampled for cadmium.

Chloride – chloride was reported above the GCTL of 250 mg/L in shallow monitoring wells MW-1A (430 mg/L), MW-16AR (380 mg/L), CW-2A (2,900 mg/L) and CW-3A (540 mg/L) and intermediate monitoring well MW-23B (390 mg/L). These wells will not be re-sampled for chloride.

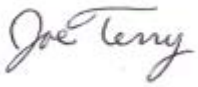
Iron –iron was detected above the GCTL of 300 µg/L in all but eight (8) monitoring wells sampled this event with concentrations ranging from 380 µg/L to 52,000 µg/L. The concentrations are consistent with previous results and will not be re-sampled and the reported values considered representative of current conditions. Iron was detected in the surface water locations SW-3 (downstream) and SW-4 (upstream) at concentrations of 1,100 µg/L and 1,400 µg/L, respectively, which is slightly above the GCTL for iron in surface water (1,000 µg/L) but consistent with previous events.

Sodium – sodium was reported above the GCTL of 160 mg/L in monitoring well MW-1A (230 mg/L), CW-2A (170 mg/L) and CW-3A (250 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 thirteen (13) shallow groundwater monitoring wells (MW-1A, 2A, 3A, 4A, 8A, 16AR, 17AR, 22AR, 25A, 31A, 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 me at (813) 943-8633 or by email jterry@envplanning.com.

Sincerely,



Joe Terry
Project Engineer
EPS

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

Table 3

SUMMARY OF GROUNDWATER ANALYTICAL DATA
27th SEMI-ANNUAL WATER QUALITY MONITORING EVENT
J.E.D. SOLID WASTE MANAGEMENT FACILITY

Well ID	Acetone	Benzene	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Iron	Nickel	Sodium	Vanadium	Ammonia	Chloride	Nitrate (N)	TDS
	GCTL (ug/L)	PDWS (ug/L)	PDWS (ug/L)	GCTL (ug/L)	PDWS (ug/L)	PDWS (ug/L)	PDWS (ug/L)	PDWS (ug/L)	PDWS (ug/L)	SDWS (ug/L)	PDWS (ug/L)	PDWS (mg/L)	GCTL (ug/L)	GCTL (mg/L)	SDWS (mg/L)	SDWS (mg/L)	SDWS (mg/L)
	6,300	**1**	**6**	**10**	**2,000**	**4**	**5**	**100**	**140**	**300**	**100**	**160**	**49**	**2.8**	**250**	**10**	**500**
MW-1A	8.9	0.45 I	0.11 I	9 U	73	0.4 U	0.45 U	3.3	1.9 U	4,700	6 U	230	7.6	4.3	430	0.25 U	1,100
MW-1A Duplicate	8.2	0.16 U	0.11 I	9 U	70	0.4 U	0.45 U	3.1	1.9 U	4,600	6 U	240	7.8	4.3	490	0.25 U	1,000
MW-1B	8.7	0.16 U	0.15 I	9 U	52	0.62 I	0.45 U	1.6 U	10	29,000	6 U	120	13	4.2	250	0.25 U	1,000
MW-2A	2.1 U	0.16 U	0.084 I	9 U	75	0.4 U	0.45 U	2.2 I	4.2	12,000	6 U	64	6.5	3.2	190 J4	0.10 U	750
MW-2B	2.1 U	0.16 U	0.11 I	9 U	55	1	0.45 U	1.6 U	14	41,000	6.3 I	71	5.6	2.1	220	0.10 U	850
MW-3A	2.1 U	2.5	0.048 I	9 U	78	0.40 U	0.45 U	3.0 I	4.5	15,000	6 U	22	4.6	14	13	0.10 U	1,200
MW-3B	2.1 U	0.16 U	0.046 U	9 U	45	2	0.45 U	1.6 U	4 I	9,900	6 U	31	5.2	3.8	70	0.10 U	1,500
MW-4A	7.2	1.2	0.046 U	9 U	85	0.4 U	0.45 U	1.6 I	1.9 U	12,000	6 U	33	2.5	18	29	0.10 U	1,200
MW-4B	3.3 I	0.16 U	0.14 I	9 U	46	0.4 U	0.45 U	2.3 I	1.9 U	180 I	6 U	74	8.6	21	120	0.10 U	1,300
MW-5A	2.1 U	0.35 I	0.17 I	9 U	9.3	0.4 U	0.45 U	2.9 I	1.9 U	1,200	6 U	22	1.6	8.4	26	0.25 U	310
MW-5B	2.1 U	0.16 U	0.12 I	9 U	40	0.4 U	0.45 U	1.6 U	1.9 U	150 I	6 U	37	3	9.6	100	0.50 U	1,100
MW-6A	2.2 I	5	0.046 U	9 U	9.7	0.4 U	0.45 U	2.2 I	1.9 U	13,000	6 U	21	5.1	4.5	37	0.05 U	250
MW-6B	2.7 I	0.16 U	0.046 U	9 U	51	0.41 I	0.45 U	1.6 U	1.9 U	1,500	6 U	9.3	1.3	0.27	34	0.05 U	80
MW-7A	2.1 U	0.16 U	0.046 U	9 U	9.6	0.4 U	0.45 U	2.6 I	1.9 U	6,900	6 U	14	3.7	8.6	29	0.05 U	120
MW-7B	2.1 U	0.16 U	0.051 I	9 U	30	0.94	0.45 U	1.6 U	3.6 I	20,000	6 U	14	2.2	3.0	21	0.05 U	520
MW-8A	2.1 U	2.5	0.098 I	9 U	43	0.4 U	0.64 I	1.8 I	3 I	8,800	6 U	5.6	5.4	4.3	13 I	0.50 U	1,400
MW-8B	2.1 U	0.16 U	0.053 I	9 U	62	0.72 I	0.45 U	1.6 U	7.7	41,000	6.4 I	31	3.9	1.1	42	0.1 U	900
MW-9A	2.1 U	9.1	0.05 U	9 U	9.3	0.4 U	0.45 U	1.6 U	1.9 U	1,000	6 U	13	0.8 I	4.8	10	0.05 U	160 J4
MW-9B	2.6 I	0.37 I	0.05 U	9 U	47	0.83	0.45 U	2.0 I	3.5 I	11,000	6 U	27	3.7	1.3	54	0.056 I	370
MW-10A	3.3 I	2.2	0.086 I	9 U	53	0.4 U	0.45 U	1.6 U	1.9 U	4,900	6 U	20	1.9	6.7	15	0.05 U	420
MW-10B	2.1 U	6.2	0.053 I	9 U	42	1.8	0.45 U	1.6 U	3.5 I	5,600	6 U	21	3.7	8.4	49	0.25 U	720
MW-11A	30	3.7	0.083 I	9 U	61	0.4 U	0.45 U	1.6 U	1.9 U	7,600	6 U	9.1	4.3	3.8	17	0.056 I	330
MW-11B	2.1 U	0.16 U	0.046 U	9 U	14	0.4 U	0.45 U	1.6 U	1.9 U	300	6 U	10	2.1	0.02	11	0.05 U	30
MW-12A	2.1 U	7.5	0.068 I	9 U	67	0.4 U	0.45 U	1.6 U	2.3 I	4,500	6 U	32	2.4	3.3	98	0.05 U	170
MW-12B	2.1 U	0.16 U	0.046 U	9 U	21	0.4 U	0.45 U	1.6 U	1.9 U	700	6 U	6.4	1.1	0.12	13	0.84	44
MW-13A	7.2	7.2	0.046 U	9 U	83	0.4 U	0.45 U	1.6 U	2.2 I	7,100	6 U	66	5.2	3.2	170	0.3 I	360
MW-13B	2.1 U	0.16 U	0.046 I	9 U	14	0.4 U	0.45 U	1.6 U	1.9 U	1,100	6 U	9.4	0.74 I	0.17	23	0.05 U	58
MW-16AR	2.1 U	0.16 U	2.4	9 U	35	0.4 U	1.1	2.0 I	1.9 U	220	6 U	160	10	1	380	6.7	1,300
MW-16AR Duplicate	2.1 U	0.16 U	2.2	9 U	35	0.4 U	1.1	1.8 I	1.9 U	220	6 U	150	10	1.2	320	5.7	1,300
MW-16BR	2.1 U	0.16 U	0.046 U	9 U	29	0.4 U	0.45 U	1.6 U	1.9 U	1,900	6 U	6.5	0.73 I	0.27	18	0.05 U	52
MW-17AR	2.1 U	0.16 U	0.71	9 U	120	0.4 U	5.1	1.6 U	1.9 U	1,400	6 U	44	11	0.99	57	1.8	610
MW-17BR	2.1 U	0.16 U	0.05 U	9 U	18	0.4 U	0.45 U	1.6 U	1.9 U	580	6 U	13	1.2	0.10	19	0.05 U	73
MW-22AR	2.1 U	0.16 U	0.14 I	9 U	36	0.4 U	0.45 I	3.4	1.9 U	100 U	6 U	13	4.9	7	14	0.1 U	600
MW-22BR	2.1 U	0.16 U	0.049 I	9 U	78	0.41 I	0.45 U	1.6 U	4	13,000	6.0 U	26	1.9	0.32	27	0.05 U	240
MW-23A	2.1 U	0.93 I	0.18 I	9 U	21	0.4 U	0.45 U	4.5	1.9 U	120 I	6 U	45	5.2	4.5	72	0.1 U	400
MW-23B	2.1 U	0.16 U	0.083 I	9 U	130	0.55 I	0.45 U	2.0 I	1.9 U	2,100	6 U	150	11	11	390	0.1 U	810
MW-24A	2.1 U	0.16 U	0.046 U	9 U	8.2	0.4 U	0.45 U	1.6 I	1.9 U	290	6 U	10	0.92 I	0.07	16	0.05 U	62
MW-24B	2.1 U	0.16 U	0.05 U	9 U	7.1	0.4 U	0.45 U	1.6 U	1.9 U	440	6 U	4.3	0.86 I	0.08	7.1	0.05 U	23
MW-25A	2.1 U	0.16 U	0.061 I	9 U	100	1.1	0.45 U	1.6 U	3 I	18,000	6 U	60	6.8	2.8	110 J4	0.05 U,J4	610
MW-25B	2.1 U	0.16 U	0.11 I	9 U	66	0.4 U	0.45 U	4.1	1.9 U	1,100	6 U	11	6.8	0.24	27	0.1 U	82
MW-27A	2.1 U	0.16 U	0.084 I	9 U	12	0.4 U	0.45 U	1.9 I	1.9 U	680	6 U	4.7	3.1	0.73	5.6	0.05 U	60
MW-27B	2.1 U	0.16 U	0.05 U	9 U	19	0.4 U	0.45 U	1.9 I	1.9 U	520	6 U	21	1.9	0.05	34	0.05 U	77
MW-28A	5.3	0.16 U	0.048 I	9 U	38	0.4 U	0.45 U	1.6 U	1.9 U	2,600	6 U	17	0.55 U	1.9	22	0.89	140
MW-28B	3.8 I	0.16 U	0.058 I	9 U	36	0.4 U	0.45 U	1.8 I	1.9 U	1,200	6 U	14	2.4	0.11	30	0.08 I	89
MW-29A	2.1 U	1.2	0.71	9 U	50	0.4 U	1.5	4.9	1.9 U	3,400	6 U	11	5.4	0.74	16	0.05 U	120
MW-29B	2.1 U	0.16 U	0.046 U	9 U	69	0.4 U	0.45 U	1.6 U	1.9 U	2,300	46	17	2.2	0.07	18	0.05 U	150
MW-31A	2.1 U	0.16 U	0.13 I	9 U	58	0.66 I	0.67 I	1.6 U	29	52,000	20	19	6.2	4.5	16	0.05 U	1,100
MW-31B	2.1 U	0.16 U	0.068 I	9 U	78	0.4 U	0.45 U	1.8 I	1.9 U	6,000	6 U	15	2.4	0.45	28	0.05 U	180
CW-1A	2.1 U	0.16 U	0.16 I	140	110	0.4 U	0.45 U	10	2.3 I	13,000	6.1 I	68	7.3	4.5	120	0.1 U	650
CW-2A	2.1 U	0.16 U	0.24 I	9 U	50	0.4 U	0.45 U	5.7	1.9 U	380	6 U	170	14	14	2,900	1 U	970
CW-3A	29	0.16 U	0.18 I	9 U	92	1.2	0.45 I	8.1	1.9 U	11,000	6 U	250	14	10	540	1 U	1,400

NOTES:

I — Reported value is between the Laboratory Method Detection Limit (MDL) and the Laboratory Practical Quantitation Limit (PQL)

Reported value exceeds the PQL

Reported value exceeds the GCTL, PDWS, or SDWS

U = Sample was analyzed but not detected above the MDL

J4 = Estimated result
GCTL = Groundwater Cleanup Target Level
PDWS = Primary Drinking Water Standard
SDWS = Secondary Drinking Water Standard

TABLE 5

SUMMARY OF SURFACE WATER FIELD MEASUREMENTS AND ANALYTICAL RESULTS
27th SEMI-ANNUAL WATER QUALITY MONITORING EVENT
J.E.D. SOLID WASTE MANAGEMENT FACILITY

Parameter Monitored	FL-SWQC Class III / or SWCTL	Units	Monitoring Results	
			SW-3 (Downstream)	SW-4 (Upstream)
Field Parameters				
Dissolved Oxygen	38% Saturation(1)	mg/l	3.00	1.91
pH	Not less than background (2)	SU	5.34	4.52
Conductivity	< 50% above background or 1,275, whichever is >	µS/cm	235	92
Temperature at Sampling Time	--	°C	17.63	16.64
Turbidity	< 29 above background	NTU	1.6	0.5
Water Elevation(3)	--	feet	73.75	77.25
Laboratory Parameters				
Acetone	1,700	ug/L	74	2.6 i
Barium	-	ug/L	22	13
Calcium	-	mg/L	14	4.2
Iron	1	mg/L	1.1	1.4
Magnesium	--	mg/L	4.5	2.1
COD	-	mg/L	73	79
Fecal Coliform	800	#/100 mL	20	380
Hardness as CaCO3	-	mg/L	52	19
Nitrogen, Total as N	-	mg/L	1.8	1.6
Organic Carbon, Total	-	mg/L	22	23
Phosphorus, Total	-	mg/L	0.11	0.17
Total Dissolved Solids	-	mg/L	220	120
Total Suspended Solids	-	mg/L	3.4	4.2

Notes:
Only parameters with detetctions above the Method Reporting Limit are shown.
(1): Per 62-302.533(1)(a)2
(2): Per 62-302.530(96)(c); If natural background is less than 6 units, in predominantly fresh waters the pH shall not vary below natural background or vary more than one unit above natural background. The pH of SW-3 and SW-4 reported in the initial site investigation (Hydrogeologic Investigation Report and Water Quality Monitoring Plan, Kubal-Furr & Associates, April 2002) was 5.86 and 5.40 SU's, respectively.
(3): Surface Water Elevations referenced to NGVD 1929
Concentrations in shaded cells did not meet the GCTL or FL-SWQC Class III Criteria.
i = The reported value is between the laboratory Method Detection Limit and the laboratory Practical Quantitation Limit
U = indicates that the compound was analyzed for but not detected at or above the value shown