

<u>By E-Mail</u> Aws97@aol.com

Mr. Gerald Laurenco Friends Recycling, LLC 2350 N. W. 27th Avenue Ocala, FL 34475 Florida Department of Environmental Protection

> Central District 3319 Maguire Boulevard, Suite 232 Orlando, Florida 32803-3767

Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

OCD-SW-09-0030

Marion County – SW Friends Recycling, LLC – C&D Disposal & Recycling <u>Fifteenth Semi-Annual Groundwater Monitoring Event</u>

Dear Mr. Laurenco:

Hydrologic Associates U.S.A., Inc. (HAI) submitted the following document on your behalf: "The Fifteenth Semi-annual Report for Friends Recycling C and D Facility." The cover letter was dated September 24, 2008 and signed and sealed on September 30, 2008. The Department received the submittal on October 6, 2008. The submittal included revised Well Completion Forms and the surveyed locations of the monitoring wells shown on a site plan.

The report dated September 28, 2008 is not acceptable. The Department's detail review comments are in Attachment 1. Please respond in writing to our comments within 45 days.

The cover letter for the Semi-annual Report notes, "...the sample from monitor well MW-9S was devoid of volatile detections. It is HAI's understanding that at the time of installation...that should this be the case, then the well would be removed from the permanent network." The report appears to consider that this condition has been met and requests verification before the February 2009 sampling event.

- 1. The Department's understanding is that the well under consideration is MW-9D rather than MW-9S.
- 2. The Department does not accept the conclusion that either MW-9S or MW-9D was devoid of volatile detections for the following reasons:
 - a. The August 2008 sampling included only the routine semi-annual sampling parameters. The initial sample for all new wells should have included the parameters listed in MPIS Attachment C. This is an expanded list of parameters required for initial sampling of monitoring wells. It is specifically required by MPIS Condition #6.
 - b. The Department cannot consider the samples results obtained as valid. The Dissolved Oxygen levels need to be less than or equal 20% for the volatile results to be acceptable. Dissolved Oxygen levels for MW-9S and MW-9D were both over 100%.

Mr. Gerald Laurenco OCD-SW-09-0030 Page #2

Based on the Department's review of the above document, the Department requires that the February 2009 sampling include the Initial Sample Parameters (Attachment C of the permit MPIS) for all wells, except MW-1. The regular semi-annual parameters are acceptable for MW-1 because it is not a new well. Dissolved Oxygen levels must be $\leq 20\%$ for the volatile organic samples to be considered valid. If you cannot obtain an acceptable DO level, make sure you follow the requirements of DEP-SOP-001/01 FS 2200 Groundwater Sampling Section 3.5 (and possibly 3.6).

Please complete the Feb 2009 sampling event within 45 days. The Department must be notified at least 14 days prior to the scheduled sampling date.

Please contact me by e-mail at marjorie.heidorn@dep.state.fl.us or phone at (407) 893-3320 with questions about this letter or if you wish to meet to discuss ideas for the groundwater sampling event.

Sincerely,

FThomas fillogynohi

F. Thomas Lubozynski, P.E. Waste Program Administrator

Date: February 11, 2009

FTL/mh

Enclosure:

- 1. Review Comments on the Semi-annual Report, dated September 24, 2008. (Attachment 1)
- 2. Initial Sample Parameters (Attachment C of the permit MPIS)
- 3. Aerial 1 Land Surrounding Friends Recycling
- cc: Juan C. Guerra, P.E., Guerra Development Corp. <u>guerracorp@att.net</u> James T. Miller, P.E., Hydrologic Associates U.S.A., Inc. <u>JMiller@HAIMiami.com</u> Brad Waller, President, Hydrologic Associates U.S.A., Inc. <u>bwaller@HAIMiami.com</u>

Attachment 1: Review Comments on the Semi-annual Report, dated September 24, 2008.

General Sampling

 The August 2008 sampling included the routine semi-annual sampling parameters for all monitoring wells. For the new wells (MW-5 is considered a new well since it was not used previously), the sampling should have included the parameters listed in MPIS Attachment C. This is an expanded list of parameters required for initial sampling of monitoring wells. It is specifically required by MPIS Condition #6. The February 2009 sampling shall be done for the Initial Sample Parameters (Attachment C of the permit MPIS) for the 5 new MPIS wells plus MW-9D. (MW-1 can be sampled for the standard semi-annual list of parameters.)

Clerical

- 2. The first paragraph under "Introduction" stated that all four wells are considered compliance wells." Please note for future reports that there are a total of 6 wells in the <u>current</u> MPIS. Four are detection wells and two are compliance wells.
- 3. The lab reported Phenols in MW-8 as 0.022 mg/L. The Exceedance Table listed the value as 0.22 mg/L. Please verify that this is a clerical error.

Field Parameters

4. The submitted field parameter table indicates that the measured dissolved oxygen and calculated % in ground water samples collected from monitoring wells were:

Dissolved Oxygen	MW-1	MW-5	MW-6	MW-7	MW-8	MW-9S	MW-9D
C°	26.65	24.02	23.92	25.51	23.41	23.56	23.55
mg/L reported	2.4	1.0	2.6	1.6	1.2	8.6	19.6
% reported	0.64%	0.08%	0.21%	0.13%	0.10%	0.73%	1.66%
% DEP Calculated from DO mg/L and C°	29.9%	12.5%	30.8%	19.5%	14.1%	101%	231%

Legend Unreasonably high DO mg/L in natural ground water Result not fit the reported mg/L and C° Calculated results too high to assure valid results

- a. Dissolved Oxygen levels need to be less than or equal to 20% for the volatile results to be acceptable. Dissolved Oxygen for MW-9S and MW-9D were both over 100%. DEP does not accept the sampling of the volatile organics for MW-9S and MW-9D to be valid.
- b. The values reported (mg/L and percent saturation) do not correlate. Please explain (show calculations) how one was converted to the other.
- c. Were some results reported incorrectly because based on the reported mg/L levels the saturation point is exceeded?
- d. When completing the Groundwater Sampling Log (Form FD 9000-24) the results should be reported in the units indicated on the measuring instrument. For Dissolved Oxygen, circle the appropriate unit of measure and then record the number on the instrument.
- e. These DO values are an indication that the water column in the well and/or the sample had been agitated and may not represent in situ water quality, that the dissolved oxygen meter was not operating properly, or that there is some other explanation for the high dissolved oxygen which you have not provided.

It is suggested that purge tubing be completely submerged within the measurement container so that purge water will not drip or cascade down the side of the container. Additionally, the dissolved oxygen meter should be placed in the container such that a

constant flow of purge water is flowing over the probe in order to assure a more accurate reading.

While a faster rate of pumping may produce acceptable results, if dissolved oxygen in the sample is high, the affected wells should be purged by pumping at low flow rates of 0.1 to 1 liters per minute. If during purging and sampling dissolved oxygen in a sample exceeds 20 percent of saturation, aeration of the sample may have occurred unless it can be *demonstrated* that in situ ground water contains the levels of dissolved oxygen measured in the ground water samples. The wells with high dissolved oxygen values are acceptable. Care should be taken during every sampling event to ensure that neither the water column in the wells nor the samples are agitated prior to or while filling sample containers.

- f. If the DO level is still too high make sure you follow the requirements of DEP-SOP-001/01 FS 2200 Groundwater Sampling Section 3.5 (and possibly 3.6).
- 5. Turbidity in ground water samples collected from monitoring wells were:

Turbidity	MW-1	MW-5	MW-6	MW-7	MW-8	MW-9S	MW-9D
NTUs	310	296	14.2	31.7	4.09	24.7	21.8

Legend
Calculated results too high to
assure valid results. Well may need
to be redeveloped
Lesser concern but should have
been discussed in the report.

Turbidity for a properly designed, constructed, developed, and sampled well should not exceed 20 Nephelometric Turbidity Units (NTUs). If turbidity exceeds 20 NTU's, repurging and resampling should be conducted. While a faster rate of pumping may produce acceptable results, if turbidity in the sample is high, the affected wells should be purged by pumping at low flow rates of 0.1 to 1 liters per minute.

During future ground water sampling events, please exercise care to ensure that neither the water column in the well nor the sample are agitated prior to or while filling sample containers. If turbidity values during purging and sampling remain high, the affected wells may need to be abandoned and a ground water monitoring well, designed for site specific conditions, installed.

If the turbidity level is still too high make sure you follow the requirements of DEP-SOP-001/01 FS 2200 Groundwater Sampling Section 3.5 (and possibly 3.6).

In the future, if any turbidity results are greater than 20 NTUs the report shall discuss the suspected reason for the elevated level, what has been done to correct the turbidity, and how the results may be affected by the elevated turbidity.

Lab Reports

- 6. MW-8 is a compliance well not a detection well as listed in Validator. Please use the "DE" well type in future submittals.
- 7. All Field Parameters, including ground water elevations, must be included in all future submittals of the Validator data.
- 8. The reported detection limit for Antimony was 13 ug/L, but Antimony has a primary standard of 6 ug/L and a PQL of 5 ug/L. As noted in Condition #9 of the MPIS, please confer with your consultant and analytical laboratory prior to sampling to ensure the analytical method is capable of achieving detection limits at or below the Ground Water Cleanup Target Levels (GCTLs) in Chapter 62-777, F.A.C. GCTLs are used as screening tools and interim guidelines for ground water minimum criteria until standards are promulgated.

Maps

9. Condition #18 of the MPIS requires that following installation of the monitoring wells:

One (1) paper copy and one (1) electronic copy of a drawing must be submitted within thirty (30) days following monitoring well installation showing the location of all monitoring wells (active and abandoned), water bodies and waste filled areas. The location of features on the drawing must be horizontally and vertically located by standard surveying techniques. The drawing shall include all monitoring well locations, each monitoring well name and identification (WACS) number, the top of casing, pad elevation, permanent benchmark(s) and/or corner monument marker(s) referenced to NGVD with an accuracy of 0.01 feet. The latitude and longitude of each well in degrees, minutes and seconds, to two (2) decimal places, with an accuracy of 15 feet, must be determined and provided on the drawing. The survey shall be conducted and certified by a Florida Licensed Surveyor and Mapper. [62-701.730(4)(b), 62-701.510(3)(d)1, F.A.C.]

Although the report does not name Figure 2, it implies that the Department is to use it as the official Site Plan, meeting the requirement of Condition #18. However:

- a. There is no information on how the elevations were obtained. (A hand held GPS would not give the accuracy required.)
- b. There is no assurance that the survey was conducted and certified by a Florida Licensed Surveyor and Mapper. It is not signed and sealed.
- c. Two copies of Figure 3 "Ground Water Flow Plan" were provided. Both were signed and sealed. If one of these seals was intended for the Figure 2, it would not be acceptable because it was signed and sealed by a Professional Engineer. MPIS Condition #18 requires a site plan be signed and sealed by a Florida Licensed Surveyor and Mapper.

Figure 2 is not acceptable; it does not meet the requirement of Condition # 18 of the permit MPIS. Please provide the map as specified in Condition #18.

10. There are no contours on the "Ground Water Flow Plan" (Figure 3). An arrow indicating groundwater flow direction in one location is not a contour map. Also, not all of the flow would be toward the east as indicated by the arrow. (The ground water values posted indicate that flow should be from MW-1 to the northwest toward the MW-9 cluster.).

Figure 3 does not satisfy the requirements of a ground water contour map. Please provide a <u>contoured</u> ground water map as required by Condition #22 of the MPIS.

11. The pages titled "Introduction" and "Results" both note that the ground water flow direction is variable due to pumping at nearby groves. This statement has never been supported with data.

If the groves are ever to be referred to again, the statement must at the minimum be accompanied with a copy of the attached aerial (Aerial 1) with all of the suspected groves <u>clearly</u> outlined and labeled with the name of each grove and location of the irrigation wells.

Exceedances

- 12. The page titled "Results" states, "The exceedance table shows parameters which exceeded groundwater standards during this sampling and analysis event. Some parameters are considered naturally occurring, especially when no other indicator parameters are above criteria." This is too general of a statement to be of value. In the future, specify which parameters should be considered natural. Also, give a reason for that conclusion. How do you know such parameters are in the natural environment at a concentration that would result in the concentration measured? Also, if naturally occurring why are the measured concentrations so varied among the wells?
- 13. The Exceedance Table omitted MW-1 Arsenic 0.011 mg/L and MW-5 TDS 586 mg/L. In the future, all exceedances shall be included in the Exceedance Table.

Monitoring Site	Parameter	Result	Qualifier	Units	Standar d	DEP Comment
Primary Standard						
MW-1	Arsenic	11		ug/L	10	High Turbidity (360 NTUs) need to see results with low turbidity. The well has had <20 NTUs in the past.
MW-8	Benzene	1.3		ug/L	1	Could be an issue. First Sample from this well. Will watch.
MW-7	Nitrogen, Nitrate (as N)	14		mg/L	10	Could be an issue. First Sample from this well. Will watch.
Secondary Standard						
MW-1	Aluminum	360	V	ug/L	200	
MW-7	Aluminum	220	V	ug/L	200	
MW-9D	Aluminum	400	V	ug/L	200	
MW-1	Iron	3600		ug/L	300	
MW-5	Iron	11,000		ug/L	300	
MW-7	Iron	350		ug/L	300	
MW-8	Iron	1,100		ug/L	300	
MW-1	Solids, Total Dissolved	1560		mg/L	500	
MW-5	Solids, Total Dissolved	586		mg/L	500	
MW-6	Solids, Total Dissolved	598		mg/L	500	
MW-7	Solids, Total Dissolved	676		mg/L	500	
MW-8	Solids, Total Dissolved	648		mg/L	500	
MW-1	Sulfate	670		mg/L	250	
GTCL						
MW-1	Phenols, Total	32.6		ug/L	10	
MW-5	Phenols, Total	24.6		ug/L	10	
MW-6	Phenols, Total	17.9		ug/L	10	
MW-7	Phenols, Total	16		ug/L	10	
MW-8	Phenols, Total	22		ug/L	10	
MW-9D	Phenols, Total	13.3		ug/L	10	
MW-9S	Phenols, Total	16.6		ug/L	10	

14. Modified Exceedance Table with DEP comments:

- 15. The Department is not requesting Contamination Evaluation (Rule 62-701.510(7)(a), F.A.C.) of exceedances at this time, because the Department does not have reasonable assurance that the above list of exceedances is representative of the ground water quality for the following reasons:
 - a. Sampling was incomplete. The new wells were not sampled for all of the initial sampling parameters.
 - b. Need more sampling events to verify a trend.
 - c. The turbidity may have interfered with some parameters. (In particular Arsenic in MW-1 may be a turbidity problem rather than a true exceedance.)
 - d. The dissolved oxygen levels in important wells (MW-1, MW-9S, and MW-9D) were unacceptable. (In the future if the dissolved oxygen is out of range, the Department may require complete resampling of the volatiles for the wells with excessive DO.)

Next Step

16. As stated in the cover letter, please complete the Feb 2009 semi-annual/initial sampling event and respond to this letter within 45 days. If you are willing we would appreciate the data being submitted electronically using ADaPT, rather than Validator. This is the new QA/QC software the Solid Waste Program is beginning to use. Please contact Ms. Laxsamee Levin at Laxsamee.levin@dep.state.fl.us or 407-893-3311 for more information about ADaPT.

FRIENDS RECYCLING LLC-C & D DISPOSAL AND RECYCLING

PARAMETER MONITORING REPORT

Rules 62-701.510(8)(a)&(d) & 62-701.730(4)(b)5, F.A.C. WACS Report Type: INICD Initial Ground Water Monitoring (Page 1 of 10)

WACS_FACILITY 21012

SAMPLING DATE/TIME

WACS_WELL _____

SAMPLING METHOD

MONITORING_SITE_NUM

Ground water classification: G-II

WELL TYPE: (CO) Compliance (DE) Detection

Well Purged prior to Sample Collection? (Y/N) _____

STORET CODE	PARAMETER MONITORED	ANALYSIS DATE	FIELD FILTERED (/N)	PRESERV. INTACT (Y/n)	ANALYSIS METHOD	ANALYSIS RESULT	DETECTION LIMIT	UNITS	QUALIFIER
082545	Water Elevation (NGVD)							Ft	
000010	Temperature (field)							deg C	
000299	Dissolved Oxygen (field)							Mg/L	
000406	pH (field)							STD	
000094	Spec. Conductance (field)							Umhos/cm	
082078	Turbidity (field)							NTU	
000610	Total Ammonia as N							Mg/L	
000940	Chlorides							Mg/L	
000620	Nitrate as N							Mg/L	
000945	Sulfate							Mg/L	
070300	Total Dissolved Solids							Mg/L	
032730	Phenols								
	METALS								
001105	Aluminum							Ug/L	
001097	Antimony							Ug/L	
001002	Arsenic							Ug/L	
001007	Barium							Ug/L	
001012	Beryllium							Ug/L	
001027	Cadmium							Ug/L	
001034	Chromium							Ug/L	
001037	Cobalt							Ug/L	
001042	Copper							Ug/L	
001045	Iron							Ug/L	
001051	Lead							Ug/L	
074000									

Mercury

071900

FRIENDS RECYCLING LLC-C & D DISPOSAL AND RECYCLING

PARAMETER MONITORING REPORT

Rules 62-701.510(8)(a)&(d) & 62-701.730(4)(b)5, F.A.C. WACS Report Type: INICD Initial Ground Water Monitoring (Page 2 of 10)

WACS_FACILITY 21012

SAMPLING DATE/TIME _____

WACS_WELL _____

SAMPLING METHOD

MONITORING_SITE_NUM _____

Ground water classification: G-II

WELL TYPE: (CO) Compliance (DE) Detection

Well Purged prior to Sample Collection? (Y/N) _____

STORET CODE	PARAMETER MONITORED	ANALYSIS DATE	FIELD FILTERED (/N)	PRESERV. INTACT (Y/n)	ANALYSIS METHOD	ANALYSIS RESULT	DETECTION LIMIT	UNITS	QUALIFIER
001067	Nickel							Ug/L	
001147	Selenium							Ug/L	
001077	Silver							Ug/L	
000929	Sodium							Mg/L	
001059	Thallium							Ug/L	
001102	Tin							Ug/L	
001087	Vanadium							Ug/L	
001092	Zinc							Ug/L	
	ORGANICS								
034205	Acenaphthene							Ug/L	
034200	Acenaphthylene							Ug/L	
081552	Acetone							Ug/L	
076997	Acetonitrile; Methyl cyanide							Ug/L	
081553	Acetophenone							Ug/L	
073501	2-Acetylaminofluorene; 2-AAF							Ug/L	
034210	Acrolein							Ug/L	
034215	Acrylonitrile							Ug/L	
039330	Aldrin							Ug/L	
078109	Allyl chloride							Ug/L	
077581	4-Aminobiphenyl							Ug/L	
034220	Anthracene							Ug/L	
034030	Benzene							Ug/L	
034526	Benzo(a)anthracene							Ug/L	
034230	Benzo(b)fluoranthene							Ug/L	

FRIENDS RECYCLING LLC-C & D DISPOSAL AND RECYCLING

PARAMETER MONITORING REPORT

Rules 62-701.510(8)(a)&(d) & 62-701.730(4)(b)5, F.A.C. WACS Report Type: INICD Initial Ground Water Monitoring (Page 3 of 10)

WACS_FACILITY 21012

SAMPLING DATE/TIME

WACS_WELL _____

SAMPLING METHOD

MONITORING_SITE_NUM _____

Ground water classification: G-II

WELL TYPE: (CO) Compliance (DE) Detection

Well Purged prior to Sample Collection? (Y/N) _____

STO CO	DE	PARAMETER MONITORED	ANALYSIS DATE	FIELD FILTERED (/N)	PRESERV. INTACT (Y/n)	ANALYSIS METHOD	ANALYSIS RESULT	DETECTION LIMIT	UNITS	QUALIFIER
034	242	Benzo(k)fluoranthene							Ug/L	
034	247	Benzo(a)pyrene							Ug/L	
034	521	Benzo(g,h,i)perylene							Ug/L	
077	147	Benzyl alcohol							Ug/L	
039	337	alpha-BHC							Ug/L	
039	338	beta-BHC							Ug/L	
046	323	delta-BHC							Ug/L	
039	340	gamma-BHC; Lindane							Ug/L	
034	273	Bis(2-chloroethyl)ether							Ug/L	
034	278	Bis(2-chloroethoxy)methane							Ug/L	
073	522	Bis (2-chloro-1-methylethyl) ether							Ug/L	
039	100	Bis(2-ethylhexyl)phthalate							Ug/L	
073	085	Bromochloromethane							Ug/L	
032	101	Bromodichloromethane							Ug/L	
032	104	Bromoform							Ug/L	
034	413	Bromomethane							Ug/L	
034	636	4-Bromophenyl phenyl ether							Ug/L	
034	292	Butyl benzyl phthalate							Ug/L	
077	041	Carbon Disulfide							Ug/L	
032	102	Carbon Tetrachloride							Ug/L	
039	350	Chlordane							Ug/L	
073	529	p-Chloroaniline							Ug/L	
034	301	Chlorobenzene							Ug/L	
039	460	Chlorobenzilate							Ug/L	

p-chloro-m-cresol

034452

FRIENDS RECYCLING LLC-C & D DISPOSAL AND RECYCLING

PARAMETER MONITORING REPORT

Rules 62-701.510(8)(a)&(d) & 62-701.730(4)(b)5, F.A.C. WACS Report Type: INICD Initial Ground Water Monitoring (Page 4 of 10)

WACS_FACILITY 21012

SAMPLING DATE/TIME

WACS_WELL _____

SAMPLING METHOD

MONITORING_SITE_NUM _____

Ground water classification: G-II

WELL TYPE: (CO) Compliance (DE) Detection

Well Purged prior to Sample Collection? (Y/N) _____

STORET CODE	PARAMETER MONITORED	ANALYSIS DATE	FIELD FILTERED (/N)	PRESERV. INTACT (Y/n)	ANALYSIS METHOD	ANALYSIS RESULT	DETECTION LIMIT	UNITS	QUALIFIER
034311	Chloroethane							Ug/L	
032106	Chloroform							Ug/L	
034418	Chloromethane							Ug/L	
034581	2-Chloronaphthalene							Ug/L	
034586	2-Chlorophenol							Ug/L	
034641	4-Chloropheny phenyl ether							Ug/L	
081520	Chloroprene							Ug/L	
034320	Chrysene							Ug/L	
077151	m-Cresol							Ug/L	
077152	o-Cresol							Ug/L	
077146	p-Cresol							Mg/I	
000720	Cyanide							Ug/L	
039730	2,4-D; 2,4-Dichlorophenoxyacetic acid							Ug/L	
039360	4,4-DDD							Ug/L	
039365	4,4-DDE							Ug/L	
039370	4,4-DDT							Ug/L	
073540	Diallate							Ug/L	
034556	Dibenz(a,h)anthracene							Ug/L	
081302	Dibenzofuran							Ug/L	
032105	Dibromochloromethane							Ug/L	
049146	1,2-Dibromo-3-chloropropane							Ug/L	
077651	1,2-Dibromoethane							Ug/L	
039110	Di-n-butylphthalate							Ug/L	

1,2-Dichlorobenzene

034536

FRIENDS RECYCLING LLC-C & D DISPOSAL AND RECYCLING

PARAMETER MONITORING REPORT

Rules 62-701.510(8)(a)&(d) & 62-701.730(4)(b)5, F.A.C. WACS Report Type: INICD Initial Ground Water Monitoring (Page 5 of 10)

WACS_FACILITY 21012

SAMPLING DATE/TIME _____

WACS_WELL _____

SAMPLING METHOD

MONITORING_SITE_NUM

WELL TYPE: (CO) Compliance (DE) Detection

Well Purged prior to Sample Collection? (Y/N) Ground water classification: <u>G-II</u>

STORET CODE	PARAMETER MONITORED	ANALYSIS DATE	FIELD FILTERED (/N)	PRESERV. INTACT (Y/n)	ANALYSIS METHOD	ANALYSIS RESULT	DETECTION LIMIT	UNITS	QUALIFIER
034566	1,3-Dichlorobenzene							Ug/L	
034571	1,4-Dichlorobenzene							Ug/L	
034631	3,3-Dichlorobenzidine							Ug/L	
049263 034668	trans-1,4-Dichloro-2-butene Dichlorodifluoromethane							Ug/L Ug/L	
034496	1,1-Dichloroethane							Ug/L	
034531	1,2-Dichloroethane							Ug/L	
034501	1,1-Dichloroethene							Ug/L	
077093	cis-1,2-Dichloroethene							Ug/L	
034546	trans-1,2-Dichloroethene							Ug/L	
034601	2,4-Dichlorophenol							Ug/L	
077541	2,6-Dichlorophenol							Ug/L	
034541	1,2-Dichloropropane							Ug/L	
077173	1,3-Dichloropropane							Ug/L	
077170	2,2-Dichloropropane							Ug/L	
077168	1,1-Dichloropropene							Ug/L	
034704	cis-1,3-Dichloropropene							Ug/L	
034699	trans-1,3-Dichloropropene							Ug/L	
039380	Dieldrin							Ug/L	
034336	Diethyl phthalate							Ug/L	
073553	Thionazin							Ug/L	
046314	Dimethoate							Ug/L	
073558	p-(Dimethylamino)azobenzene							Ug/L	
073559	7,12-Dimethylbenz(a)anthracene							Ug/L	
082213	3,3-Dimethylbenzidine							Ug/L	

DEP Form 62-522.900(2) Effective April 14, 1994

FRIENDS RECYCLING LLC-C & D DISPOSAL AND RECYCLING

PARAMETER MONITORING REPORT

Rules 62-701.510(8)(a)&(d) & 62-701.730(4)(b)5, F.A.C. WACS Report Type: INICD Initial Ground Water Monitoring (Page 6 of 10)

WACS_FACILITY 21012

SAMPLING DATE/TIME

WACS_WELL

SAMPLING METHOD

MONITORING_SITE_NUM _____

Ground water classification: G-II

WELL TYPE: (CO) Compliance (DE) Detection

Well Purged prior to Sample Collection? (Y/N) _____

STORET CODE	PARAMETER MONITORED	ANALYSIS DATE	FIELD FILTERED (/N)	PRESERV. INTACT (Y/n)	ANALYSIS METHOD	ANALYSIS RESULT	DETECTION LIMIT	UNITS	QUALIFIER
034606	2,4-Dimethylphenol							Ug/L	
034341	Dimethyl phthalate							Ug/L	
045622	m-Dinitrobenzene							Ug/L	
034657	2-Methyl-4,6-dinitrophenol							Ug/L	
034616	2,4-Dinitrophenol							Ug/L	
034611	2,4-Dinitrotoluene							Ug/L	
034626	2,6-Dinitroltoluene							Ug/L	
081287	DNBP (Dinoseb)							Ug/L	
034596	Di-n-octyl phthalate							Ug/L	
077579	Diphenylamine							Ug/L	
081888	Disulfoton							Ug/L	
034361	Endosulfan I							Ug/L	
034356	Endosulfan II							Ug/L	
034351	Endosulfan sulfate							Ug/L	
039390	Endrin							Ug/L	
034366	Endrin aldehyde							Ug/L	
034371	Ethylbenzene							Ug/L	
073570	Ethyl methacrylate							Ug/L	
073571	Ethyl methanesulfonate							Ug/L	
038462	Famphur							Ug/L	
034376	Fluoranthene							Ug/L	
034381	Fluorene							Ug/L	
039410	Heptachlor							Ug/L	

Heptachlor epoxide

039420

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Rules 62-701.510(8)(a)&(d) & 62-701.730(4)(b)5, F.A.C. WACS Report Type: INICD Initial Ground Water Monitoring (Page 7 of 10)

WACS_FACILITY 21012

SAMPLING DATE/TIME

WACS_WELL _____

SAMPLING METHOD

MONITORING_SITE_NUM

Ground water classification: G-II

WELL TYPE: (CO) Compliance (DE) Detection

Well Purged prior to Sample Collection? (Y/N) _____

STORET CODE	PARAMETER MONITORED	ANALYSIS DATE	FIELD FILTERED (/N)	PRESERV. INTACT (Y/n)	ANALYSIS METHOD	ANALYSIS RESULT	DETECTION LIMIT	UNITS	QUALIFIER
039700	Hexachlorobenzene							Ug/L	
034391	Hexachlorobutadiene							Ug/L	
034386	Hexachlorocyclopentadiene							Ug/L	
034396	Hexachloroethane							Ug/L	
073576	Hexachloropropene							Ug/L	
034403	Indeno (1,2,3-c,d) pyrene							Ug/L	
077424	lodomethane							Ug/L	
077033	Isobutyl alcohol							Ug/L	
039430	Isodrin							Ug/L	
034408	Isophorone							Ug/L	
073582	Isosafrole							Ug/L	
081281	Kepone							Ug/L	
081593	Methacrylonitrile							Ug/L	
073589	Methapyrilene							Ug/L	
039480	Methoxychlor							Ug/L	
077103	Methyl butyl ketone							Ug/L	
073591	3-Methylcholanthrene							Ug/L	
081595	Methyl ethyl ketone							Ug/L	
081597	Methyl methacrylate							Ug/L	
073595	Methyl methanesulfonate							Ug/L	
077416	2-Methylnaphthalene							Ug/L	
039600	Methyl Parathion							Ug/L	
077596	Methylene Bromide							Ug/L	
034423	Methylene Chloride							Ug/L	
081596	Methyl isobutyl ketone							Ug/L	

DEP Form 62-522.900(2) Effective April 14, 1994

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WACS_FACILITY 21012

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SAMPLING METHOD

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WELL TYPE: (CO) Compliance (DE) Detection

Well Purged prior to Sample Collection? (Y/N) _____

STORET CODE	PARAMETER MONITORED	ANALYSIS DATE	FIELD FILTERED (/N)	PRESERV. INTACT (Y/n)	ANALYSIS METHOD	ANALYSIS RESULT	DETECTION LIMIT	UNITS	QUALIFIER
034696	Naphthalene							Ug/L	
073599	1,4-Naphthoquinone							Ug/L	
073600	1-Naphthylamine							Ug/L	
073601	2-Naphthylamine							Ug/L	
078142	o-Nitroaniline							Ug/L	
078300	m-Nitroaniline							Ug/L	
030342	p-Nitroaniline							Ug/L	
034447	Nitrobenzene							Ug/L	
034591	2-Nitrophenol							Ug/L	
034646	4-Nitrophenol							Ug/L	
073609	N-Nitrosodi-n-butylamine							Ug/L	
073611	N-Nitrosodiethylamine							Ug/L	
034438	N-Nitrosodimethylamine							Ug/L	
034428	N-Nitrosodipropylamine							Ug/L	
034433	N-Nitrosodiphenylamine							Ug/L	
073613	N-Nitrosomethylethalamine							Ug/L	
073619	N-Nitrosopiperidine							Ug/L	
078206	N-Nitrosopyrrolidine							Ug/L	
073622	5-Nitro-o-toluidine							Ug/L	
039540	Parathion							Ug/L	
077793	Pentachlorobenzene							Ug/L	
081316	Pentachloronitrobenzene							Ug/L	
				1			1	1	

Pentachlorophenol

Phenacetin

039032

073626

Ug/L

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WACS_FACILITY 21012

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SAMPLING METHOD

MONITORING_SITE_NUM _____

Ground water classification: G-II

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Well Purged prior to Sample Collection? (Y/N) _____

STORET CODE	PARAMETER MONITORED	ANALYSIS DATE	FIELD FILTERED (/N)	PRESERV. INTACT (Y/n)	ANALYSIS METHOD	ANALYSIS RESULT	DETECTION LIMIT	UNITS	QUALIFIER
034461	Phenanthrene		(()				Ug/L	
073628	p-Phenylenediamine							Ug/L	
046313	Phorate							Ug/L	
039516	Polychlorinated biphenyls							Ug/L	
039080	Pronamide							Ug/L	
077007	Propionitrile							Ug/L	
034469	Pyrene							Ug/L	
077545	Safrole							Ug/L	
039760	Silvex; 2,4,5-TP							Ug/L	
077128	Styrene							Ug/L	
000745	Sulfide							Ug/L	
039740	2,4,5-Trichlorophenoxyacetic acid							Ug/L	
077734	1,2,4,5-Tetrachlorobenzene							Ug/L	
077562	1,1,1,2-Tetrachloroethane							Ug/L	
034516	1,1,2,2-Tetrachloroethane							Ug/L	
034475	Tetrachloroethene							Ug/L	
077770	2,3,4,6-Tetrachlorophenol							Ug/L	
034010	Toluene							Ug/L	
077142	o-Toluidine							Ug/L	
039400	Toxaphene							Ug/L	
034551	1,2,4-Trichlorobenzene							Ug/L	
034506	1,1,1-Trichloroethane							Ug/L	
034511	1,1,2-Trichloroethane							Ug/L	
039180	Trichloroethene							Ug/L	

Trichlorofluoromethane

034488

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STORET CODE	PARAMETER MONITORED	ANALYSIS DATE	FIELD FILTERED (/N)	PRESERV. INTACT (Y/n)	ANALYSIS METHOD	ANALYSIS RESULT	DETECTION LIMIT	UNITS	QUALIFIER
077687	2,4,5-Trichlorophenol							Ug/L	
034621	2,4,6-Trichlorophenol							Ug/L	
077443	1,2,3-Trichloropropane							Ug/L	
073652	0,0,0-Triethyl phosphorothioate							Ug/L	
073653	sym-Trinitrobenzene							Ug/L	
077057	Vinyl Acetate							Ug/L	
039175	Vinyl Chloride							Ug/L	
034020	Xylenes							Ug/L	

Attachment 3: Aerial 1 –Land Surrounding Friends Recycling

