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VIA E-MAIL
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Mr. Gerald Lourenco
Friends Recycling, LLC
2350 Northwest 27th Avenue
Ocala, Florida 34475

OCD-SW-07-0129

Marion County - SW
Friends Recycling LLC-C&D Disposal and Recycling
Permit #SO42-0019600-005
Review of Groundwater Monitoring Reports/Non-Compliance Letter

Dear Mr. Lourenco:

The Department conducted a detailed review of the sampling and analytical groundwater data submitted to the Department for the past four semi-annual sampling events (2005-2006). The Department has the following comments:

Elevation Contour Maps

1. The groundwater contour maps for the four groundwater sampling events are not acceptable. The groundwater elevation contour maps submitted with the reports were incomplete. As stated in Monitoring Plan Implementation Schedule (MPIS) Condition #19, the maps must include monitoring well locations, groundwater elevation at each monitoring well, a bar scale, groundwater contour, date of measurement, and groundwater flow directions. In addition indicate the North direction and limits of waste.

2. Rule 62-701.510(9)(a)9, F.A.C. requires that groundwater contour maps be signed and sealed by a professional engineer or professional geologist. The signing and sealing of the entire report is acceptable. Neither the reports nor the groundwater contour maps submitted for the February and August 2005 sampling events were signed and sealed. The reports for February and August 2006 were signed and sealed.

3. The map for the August 2006 sampling event depicted an arrow pointing across the page with a notation “probable direction of ground water flow”. The narrative stated that the groundwater flow during the sampling event was unavailable due to absence of data from monitoring wells MW-2 and MW-4. Which is correct?

4. The groundwater elevation data must include a table detailing the ground water elevation data for all monitoring wells and/or piezometers. None of the reports had a groundwater elevation table. As stated in Monitoring Plan Implementation Schedule (MPIS) Condition #18, the table should include monitoring well or piezometer name, the date the ground water

level was measured, the top of casing elevation referenced to the National Geodetic Vertical Datum of 1929 (NGVD), the depth to ground water, and the ground water elevation calculated to NGVD. This table should be updated as new ground water sampling events take place.

5. For the August 2006 sampling event, the Groundwater Sampling Log (Form FD 9000-24) for monitoring well MW-3 states that the Total Well Depth is 84.3 feet. However, the narrative under the heading of Introduction states that "the measured depth of MW-3 is unknown". What is the correct depth of this well? If the information is not available the well depth must be measured.

Sampling Events/ Wells

6. The Department is concerned regarding the availability of the wells for sampling over the past 4 semi-annual. The unavailability then availability of monitoring wells is unusual. Can you explain why this happens?

Sampling events	Wells sampled	Reason for non sample
February 4, 2005	MW-1, MW-2, MW-3, MW-4	
August 1, 2005	MW-1, MW-4	MW-2 and MW-3 reportedly either destroyed or buried
February 24, 2006	MW-1, MW-2, MW-4	MW-3 reportedly destroyed or buried
August 28, 2006	MW-1, MW-3	MW-2 had 0.08 feet of water; MW-4 – could not get sampler down well unavailable

Well Monitoring Requirements

7. In a letter dated March 22, 2005, your consultant stated MW-3 was damaged and a replacement well had been installed. A well completion report has not been received by the Department as of this date. Please submit the well completion report for the replacement well (MPIS Conditions #14 and 15). A replacement well should have a different number than the original well.

8. In the report for the February 2006 sampling event, MW-3 was not available. Your consultant's report stated the well should be replaced prior to August 2006 sampling event. Was it replaced? If so, the well completion report for the new well and abandonment plan for the old well must be provided to the Department (MPIS Conditions #12, 14, and 15). Replacement wells should have a different number than the original well. If not, why not?

9. In August 2006, MW-2 and MW-4 were not available. Your consultant recommended that these wells be replaced prior to February 2007 sampling event. Based on our inspection in February 2007, MW-2 was replaced but not MW-4. Why was MW-4 not replaced? Well completion reports must be provided to the Department (MPIS Conditions #14 and 15). Replacement wells should have a different number than the original well.

10. The MPIS Condition #11 requires that all wells shall be clearly and permanently labeled and that the well site be maintained so that the wells are visible at all times. Protective barriers must be installed at all wells that may be subject to damage or heavy equipment or traffic. Also, the wells should not be in a location where they can be buried by waste.

11. According to the MPIS Condition #9, any wells that are damaged or destroyed must be reported to the Department in writing within 7 days, describing the problem and remedial measures that have been taken to prevent such occurrence. Waiting to report the damaged or destroyed wells in the groundwater report is not acceptable. Also, MPIS Conditions 9, 10, and 12 specify actions that are necessary for wells that are to be abandoned and new wells that are proposed. Ensure that these conditions of the MPIS are followed in the future.

Review of February/August 2005 Reports

12. Total dissolved solids (TDS) was reported above the groundwater secondary standard of 500 mg/L in monitoring wells MW-1 (1000 mg/L in February and 1200 mg/L in August), MW-2 (1100 mg/L in February), MW-3 (660 mg/L in February), and MW-4 (1000 mg/L in February and 1100 mg/L in August). This appears to be consistent with historical and background data.

13. Iron was reported above the groundwater secondary standard of 300 ug/L in all monitoring wells sampled ranging from 3100 ug/L to 6700 ug/L during February 2005 sampling event and MW-1 (8800 ug/L) and MW-4 (2300 ug/L) in August. This appears to be consistent with historical and background data.

14. Phenols exceeded the minimum criteria of 10 ug/L in groundwater monitoring well MW-3 (15 ug/L in February), MW-4 (19 ug/L in February) and MW-1 (24 ug/L in August) sampling event.

15. Aluminum exceeded the secondary standard of 200 ug/L in groundwater monitoring wells MW-1 (2300 ug/L), MW-2 (220 ug/L), MW-3 (1400 ug/L) and MW-4 (3300 ug/L) during the February sampling event.

16. In February, Bromodichloromethane was detected above the minimum criteria of 0.6 ug/L in MW-3 (6.1 ug/L).

17. In February, Chloroform was detected above the minimum criteria of 70 ug/L in MW-3 (320 ug/L). The exceedance table in the report incorrectly states the criteria for chloroform to be 5.7 ug/L.

Review of February/August 2006 Reports

18. Total dissolved solids (TDS) was reported above the groundwater secondary standard of 500 mg/L in monitoring wells MW-1 (800 mg/L in February and 978 mg/L in August), MW-2 (920 mg/L in February), MW-3 (1130 mg/L in August), and MW-4 (890 mg/L in February). This appears to be consistent with historical and background data.

19. Iron was reported above the groundwater secondary standard of 300 ug/L in monitoring wells MW-1 (5900 ug/L in February and 5800 ug/L in August), MW-2 (2700 ug/L in

February), MW-3 (2700 ug/L in August), and MW-4 (890 ug/L in February). This appears to be consistent with historical and background data.

20. In August, Arsenic exceeded the primary drinking water standard of 10 ug/L in monitoring in MW-1 (13 ug/L). This was not identified in either the narrative or the Exceedance Table.

21. In August, Sodium exceeded the primary drinking water standard of 160 mg/L in MW-3 (190 mg/L). This was not identified in either the narrative or the Exceedance Table.

22. In August, Phenols exceeded the minimum criteria of 10 ug/L in groundwater monitoring well MW-1 (20 ug/L).

23. Aluminum exceeded the secondary standard of 200 ug/L in groundwater monitoring wells MW-1 (2400 ug/L) and MW-3 (4500 ug/L) during the August sampling event

24. During the August sampling event six volatile organic compounds (VOCs) were detected in concentrations below groundwater criteria in groundwater at MW-3. Vinyl Chloride was detected at the groundwater criteria concentration (1 ug/L) at MW-3. In MW-1 one VOC was detected in a concentration below its groundwater criteria concentration. These measurements were identified in the narrative portion of the report.

Inspection on February 22, 2007

25. During an inspection conducted at the facility on February 22, 2007, the inspectors observed that a replacement well was installed adjacent to MW-2. It was reported that the screens in MW-3 were cleaned and silt removed. All four wells were observed onsite. The well completion report for the replacement MW-2 must be submitted to the Department, as required by MPIS Conditions #14 and 15. Also, if the original well #2 had not yet been abandoned, MPIS Condition #12 requires the submittal of a well abandonment plan.

26. MW-3 is located at the top of the highest point of the disposal area; it is more than 80 feet above the natural ground level. As indicated by the low levels of VOCs detected during the August 2006 sampling event, this well appears to have been constructed through waste or the waste disposed in the vicinity of the well may have impacted the groundwater. The recent cleaning of the screens in MW-3 may also be a reason for the VOC measurements. Continue to use the well. If the VOC concentrations do not go down, this well may have to be replaced or further assessment might be required.

Biennial Report

27. The Department's files indicate that the last biennial report was received on June 2003 and covered five sampling events through June 2003. Biennial reports must be submitted to the Department every two years (4 semi-annual sampling events). Therefore the biennial report is past due.

Corrective Actions

a. Within 15 days of receipt of this letter, answer the questions posed in Items 3, 5, 6, 8, and 9 above.

b. Ensure that all wells are permanently labeled and protective barriers are installed around each well. Within 30 days of receipt of this letter, send the Department pictures showing this has been completed.

c. Submit the well completion report for all monitoring wells installed since 2004 (specifically, the replacement wells for MW-2 and MW-3). The new wells should be given a different name from the original well (such as, MW-2R for the replacement to MW-2). Submit the information required by MPIS Conditions #14 and 15 within 30 days of receipt of this letter. Use the Groundwater Monitoring Well Completion Report Forms in the attached MPIS.

d. Within 30 days of receipt of this letter, submit complete groundwater contour maps and groundwater elevation tables for the four sampling events (Feb 2005 through August 2006). Each map must be signed and sealed by a professional engineer or professional geologist.

e. Within 30 days of receipt of this letter, submit an abandonment plan for approval by the Department prior to the abandonment of the old MW-2.

f. Submit a Biennial Report within 60 days of receipt of this letter. The report must summarize and interpret the water quality data and water level measurements collected from June 2003 through the February 2007 sampling event. Ensure the report meets all requirements of MPIS Condition #20.
    - The four monitoring wells are located around Phase 1 of the disposal facility. Determine whether the current locations of the wells are adequate for complete monitoring of both Phase 1 and Phase 2 disposal areas.
    - Include an updated site plan (drawn to scale) incorporating the Phase 2 expansion and location of the monitoring wells.
    - Since this report will include the latest sampling event, you will not have to submit an updated Biennial Report in your permit renewal application.

As discussed with your representative during the inspection at the facility the current permit is due to expire on September 4, 2007. A renewal permit application must be submitted at least 60 days prior to the expiration date of the permit (that is, July 6, 2007) for your renewal application to be deemed timely. Be aware of the following additional groundwater monitoring requirements for permit renewal applications:

- Condition #7 of the MPIS requires, “Within 90 days prior to submittal of the next permit renewal, all background, compliance and detection wells must be sampled and analyzed for water elevations, specific conductivity (field), pH (field), dissolved oxygen (field), turbidity (field), temperature (field), colors and sheens (by observation), total ammonia as N, chlorides, aluminum, iron, mercury, nitrate, sodium, sulfate, total dissolved solids (TDS), phenols, and the parameters listed in 40 CFR Part 258, Appendix I. [62-701.730(4)5, F.A.C.]” During the February inspection, you were advised to conduct this renewal sampling in place of the regular semi-annual sampling event. (The semi-annual groundwater monitoring report would still be due within 60 days of receipt of the data from the laboratory.) If that was not done, make sure you do the additional groundwater sampling in time to submit with your permit renewal application.

- Condition #16 of the MPIS, requires the total depth measurement be made on all wells at the time of permit renewal. This measurement must be reported as total apparent depth below ground surface and should be compared to the original depth of the wells. Make sure these measurements are reported in the permit renewal application or the Biennial Report.

The Department encourages the submittal of laboratory analytical data electronically, specifically in a format that can be used by the Department created public domain software Validator. This program automates the review and reduction of environmental data. Validator is being used by both the Department and data providers to reduce paperwork and time spent reviewing data. While drastically reducing data review time, validation reports also provide enhanced interpretation of results. If you would like to discuss submitting your laboratory analytical data electronically, please feel free to contact me at the phone number listed below. This public domain software can be downloaded from http://www.dep.state.fl.us/labs/software/index.htm#download. The WEB site also contains information about data formatting. The availability of this free software is being offered to you as a public service.

Please respond to the corrective actions listed above within the timeframes indicated. If you have any questions, please contact Gloria-Jean De Pradine at (407) 893-3994 or by email gloria.depradine@dep.state.fl.us.

Sincerely,

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

Date: March 22, 2007

FTL/gnd

Attachment
1. Copy of MPIS, dated April 26, 2005

cc: James T. Miller, Senior Engineer, MIAMIHYDRO@AOL.COM

EXHIBIT I

FRIENDS RECYCLING LLC-C&D DISPOSAL AND RECYCLING

WACS_FACILITY: 21012

MONITORING PLAN IMPLEMENTATION SCHEDULE (REVISED 04/26/05)

GENERAL

1. The permittee must initiate implementation of this Monitoring Plan within ninety (90) days from the date of permit issuance. [***62-701.730(4)(b), 62-701.510(1)(b)&(c), 62-522.600(5), Florida Administrative Code (F.A.C.)***]

2. The field testing, sample collection and preservation and laboratory testing, including quality control procedures, shall be in accordance with Chapter 62-160 Florida Administrative Code (F.A.C.). Approved methods as published by the Department or as published in Standard Methods, ASTM, or EPA Methods shall be used. [***62-701.730(4)(b), 62-701.510(2)(b), F.A.C.***]

3. The organization collecting samples at this site must use the Field and Laboratory Standard Operating Procedures (DEP-SOP-001/01) in Chapter 62-160, F.A.C. Sampling personnel must have a copy of the SOP for purging and sampling in the field when sampling and must be knowledgeable of its contents, procedures, and forms. The laboratory designated to conduct the chemical analyses must be certified by the Florida Department of Health Environmental Laboratory Certification Program (DoH ELCP). This Certification must be for the test method and analyte(s) that are reported. [***62-701.730(4)(b), 62-160.210(1), 62-160.320(1), F.A.C.***]

   NOTE: DEP-SOP-001/01 can be accessed at http://www.dep.state.fl.us/labs/qa/sops.htm

4. If, at any time, analyses detect parameters which are significantly above background water quality, or which are at levels above the Department's water quality standards or criteria specified in Chapter 62-520, F.A.C., in the detection wells or at the edge of the Zone of Discharge, the Permittee shall resample the wells within thirty (30) days after the sampling data are received, to confirm the data. Should the permittee choose not to resample, the Department will consider the water quality analysis as representative of current ground water conditions at the facility. If the data are confirmed, or if the permittee chooses not to resample, the permittee shall notify the Department in writing within 14 days of this finding. Upon notification by the Department, the permittee shall initiate evaluation monitoring in accordance with Rule 62-701.510(7) F.A.C. [***62-701.730(4)(b), 62-701.510(7)(a), F.A.C.***]

   NOTE: As stated in Chapter 62-520, F.A.C., the water quality standard for arsenic has decreased to 0.010 mg/l as of January 1, 2005.

GROUND WATER QUALITY MONITORING

5. The four (4) ground water monitoring wells designated for water quality testing and water level measurements are listed on Attachment A and are shown on Attachment B.

   NOTE: Unless otherwise approved by the Department, wells with high turbidities must be remediated or reinstalled to reduce the turbidity value to less than 20 NTU prior to sample collection. Should any ground water sample exhibit dissolved oxygen concentrations greater than 20% of oxygen saturation at the field measured temperature, the sampled well must be repurged then resampled as soon as an acceptable dissolved oxygen value has been attained unless it can be demonstrated that in situ ground water contains higher levels of dissolved oxygen. All water quality analyses will be performed on unfiltered samples unless approved by the Department.

6. Samples from the four (4) ground water monitoring wells shall be collected semi-annually and analyzed as follows: water elevation, specific conductivity (field), pH (field), dissolved oxygen (field), turbidity (field), temperature (field), colors and sheens (by observation), total ammonia as N, chlorides, aluminum, sulfate, iron, mercury, nitrate, sodium, phenols, total dissolved solids (TDS), and the parameters listed on the monitoring report form by EPA Methods 601 and 602. [***62-701.730(4)4, F.A.C.***]
   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.

   NOTE: GCTLs are used as screening tools and interim guidelines for ground water minimum criteria until standards are promulgated.

7. Within 90 days prior to submittal of the next permit renewal, all background, compliance and detection wells must be sampled and analyzed for water elevations, specific conductivity (field), pH (field), dissolved oxygen (field), turbidity (field), temperature (field), colors and sheens (by observation), total ammonia as N, chlorides, aluminum, iron, mercury, nitrate, sodium, sulfate, total dissolved solids (TDS), phenols, and the parameters listed in 40 CFR Part 258, Appendix I. [***62-701.730(4)5, F.A.C.***]

   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.

   NOTE: GCTLs are used as screening tools and interim guidelines for ground water minimum criteria until standards are promulgated.

8. Ground water levels in all wells, whether sampled or not, must be measured to the nearest 0.01 foot and reported semiannually unless required more frequently by permit condition. All water level measurements must be made within a one-day period. These measurements must be referenced to the National Geodetic Vertical Datum of 1929 (NGVD) [***62-701.510(9)(a), F.A.C.***]

MONITORING WELL REQUIREMENTS

9. If a monitoring well becomes damaged or inoperable, the Permittee shall notify the Department in writing within seven (7) days. The written report shall describe what problem has occurred and the remedial measures that have been taken to prevent a recurrence. The Department can require the replacement of inoperable monitoring wells or piezometers. [***62-701.510(1)(c), F.A.C.***]

10. New or replacement monitoring well design or placement must be approved by the Department. Proposed well construction details based on site-specific borings must be submitted with all supporting data (grain size distribution analyses, in-situ hydraulic conductivity testing, depth to water, etc.) for Department approval prior to well installation. Use of hollow stem auger equipment is recommended. Other drilling methods must be approved by the Department prior to well installation, [***62-701.730(4)(b), 62-522.600(3), F.A.C.***]

11. All wells shall be clearly and permanently labeled and the well site maintained so that the well is visible at all times. Protective barriers must be installed at all wells that may be subject to damage by heavy equipment or traffic. [***62-701.730(4)(b), 62-701.510(3)(d) 2, F.A.C.***]

12. An abandonment plan for abandoning any well that is unsuitable for ground water monitoring must be approved by the Department prior to abandonment. [***62-701.730(4)(b), 62-701.510(3)(d) 5, F.A.C.***]

REPORTING REQUIREMENTS

GENERAL

13. The Department must be notified in writing at least fourteen (14) days prior to the installation and/or sampling of any monitoring well(s). [***62-701.510(9)(a), F.A.C.***]

14. Well completion reports for new monitoring wells must be submitted to the Department on the attached Ground Water Monitoring Well Completion Report Form thirty (30) days after installation. Note that the top of casing elevation of each well, to an accuracy of 0.01 feet, and 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 certified by a Florida Licensed Surveyor and Mapper and provided on the form. In addition, as built well construction diagrams and soil boring logs that cover the entire depth of the monitoring well(s) must be submitted to the Department. [***62-701.730(4)(b), 62-701.510(1)(c) &***

(3)(d) 1, 62-532.410, F.A.C.]

15. 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.***]

16. A total depth measurement must be made on all wells at time of permit renewal. This measurement is to be reported as total apparent depth below ground surface and should be compared to the original total depth of the well. [***62-701.730(4)(b), 62-701.510(1)(c), F.A.C.***]

SEMI-ANNUAL

17. Required monitoring reports must be submitted to the Department within sixty (60) days of receipt of analysis from the laboratory. There are two options for submitting water quality data, paper or electronic. [***62-701.510(9)(a), F.A.C.***]

    Paper Only Reporting: One (1) copy of the monitoring report shall be submitted at the required time. The report shall include documents as listed in Table 1.

    Electronic Laboratory Analysis Reporting: One (1) copy of the paper portion of a monitoring report shall be submitted at the required time along with the disc containing the water quality data as listed in Table 1. The data required on the disc is listed in Table 2.

Table 1. Reporting Requirements

Documents	Paper report	Electronic Report*
Sampling notification	Paper or electronic	Paper or electronic
Cover letter	Paper	Paper
Summary of exceedences and recommendations	Paper	Paper
Ground water contour maps	Paper	Paper
Survey drawings	Paper	Paper
Field data sheets/sampling logs (attached)	Paper	Paper

Chain of custody	Paper	Paper
Water levels –water elevation table	Paper	Paper
Total depth measurements	Paper	Paper
Lab certification report form (attached)	Paper	Paper
Lab quality control report	Paper	Paper
Lab data sheets	Paper	Not applicable**
DEP parameters report forms	Paper	Not applicable**
Lab data in Excel tab-delimited format compatible with Validator	Not applicable	Electronic
Well completion report (attached)	Paper	Paper
Biennial report	Paper	Paper

*Electronic Compact disc media readable by a Microsoft Windows computer
**The tab-delimited text file on the disc replaced these documents

Interpretative documents such as exceedance summary and/or contour maps must be certified by a professional licensed in state of Florida whose expertise is related to the document.

Table 2. Required Fields for Electronic Data

Field Name	Description
WACS_Facility	WACS ID used to identify site where data will be uploaded. Information may be obtained from Monitoring Plan issued by the Department to the facilities.
Project	Proper name for facility used to confirm WACS ID. Information may be obtained from Monitoring Plan issued by the Department to the facilities.
WACS_Well	WACS ID used to identify specific test site (Well, Leachate, Surface Water, etc). Information may be obtained from Monitoring Plan issued by the Department to the facilities.
Monitoring_Site_Num	Test site designation relevant to the sample (MW-1, SW-1, Leachate sump, etc). (Information may be obtained from the Monitoring Plan issued by the Department to the facilities.) Use "DUP" after the well name when field duplicate samples are collected, e.g. MW-2DUP. Identify all Equipment, Field and Trip Blanks in this field using the complete word "BLANK" in your description
WACS_Report_Type	Used to identify type of report (Semiannual GW, Annual Leachate, etc), see code table. Information may be obtained from Monitoring Plan issued by the Department to the facilities.
Ground_Water_Class	Used to identify GW or SW classes (G-II, G-III, SW-II, SW-IIIF, SW-IIIM, SW-IV, LC, etc), see code table. Information may be obtained from Monitoring Plan issued by the Department to the facilities.
Well_Type	Used to identify type of well (Background, Compliance, Detection, etc), see code table. Information may be obtained from Monitoring Plan issued by the Department to the facilities. Use OT for leachate and blank samples.
Well_Purge_Flag	Used to confirm well purging prior to sampling (Y or N) (may be blank for SW, leachate and blanks).
Samp_Method	Method used to collect the sample (grab, bailer, peristaltic pump, etc), see code table on the Validator web site.
Date_Sampled	Date sample was collected. Make sure analysis dates for field parameters, e.g. pH, dissolved oxygen, temperature, conductivity, turbidity and water elevation are the same as sampling date. Duplicate samples must be at least 1 minute apart.

DOHE	DOH certification number for laboratory. For field parameters, e.g. pH, dissolved oxygen, temperature, conductivity, turbidity and water elevation, DOHE is "DEP-SOP" in place of using the NELAC certification number.
Sample_Id	Assigned by lab to each sample for QC purposes.
Matrix	Type of matrix (W= water/liquid, S= soil/sediment/solid waste).
Filtered	Used to identify filtered samples (Y or N).
Preservation_Intact	Indicates condition received at lab (Y or N).
Date_Analyzed	Date lab analysis was conducted for sample.
Ana_Method	EPA method used to analyze sample (EPA 8260). DEPSOP for water level.
Storet_Code	Appropriate STORET parameter code, (039430 for Isodrin, 82545 for water level). See STORET Code table on the Validator web site
Parameter	Name of compound analyzed (Benzene, Arsenic, etc) or measured in field (pH, DO, etc). Water level must be reported as a parameter.
Result	Numeric results of analysis, do not include non-numeric characters such as < or >. Only numeric numbers are allowed in the result and detection limit columns. Use the qualifier column to specify results and detection limits.
Units	Units corresponding to analytical results (mg/l, ug/l, etc). Use either "U" or "u" for microgram. Appropriate for the STORET Code used, see STORET Code table on the Validator web site. Feet for water level
Detection_Limit	MDL (not PQL) for analytical method, (may be blank for field parameters). Only numeric numbers are allowed in the result and detection limit columns. Use the qualifier column to specify results and detection limits.
Qualifier	Appropriate data qualifiers as listed in 62-160, FAC (may be blank), see code table on the Validator web site.
Comment	Any additional comments on the sample. Example: if J is used, explain instances in comment column. Do not use J1, J2, etc.

Notes:

- All dates are reported in the following format where HH is the hours on the 24-hour clock. MM/DD/YYYY HH:MM:SS
- A complete list of Validator Codes is available at http://www.floridadep.org/labs/cgi-bin/wacs/search.asp
- Evaluating data prior to submittal at http://www.floridadep.org/labs/software/index.htm

  will decrease the need for resubmittal.
- A sample text file may be viewed at: http://www.dep.state.fl.us/labs/software/sampledata.txt

18. Water levels in all monitoring wells, whether sampled or not, must be measured to the nearest 0.01 foot and reported semi-annually unless required more frequently by permit condition. All water level measurements must be made within a one-day period. These measurements should be reported in a table that includes well or surface water point name, date water level measured, measuring point elevation referenced to NGVD, depth to water and calculated water level elevation referenced to NGVD [***62-701.730(4)(b), 62-701.510(9)(a) 8, F.A.C.***]

19. A ground water elevation contour map for each monitored aquifer zone must be submitted semi-annually to the Department. Ground water elevation contour map(s) should include monitoring well locations, ground water elevation at each monitoring well location referenced to NGVD, a bar scale, ground water contour

interval, date of measurement and ground water flow direction. The map(s) must incorporate adjacent and on-site surface water elevations where appropriate. These maps shall be signed and sealed pursuant to Florida Statutes (F.S.) Chapters 471 and 492 which require that documents requiring the practice of professional engineering or professional geology, as described in Chapter 471 or 492, F.S., be signed and sealed by the professional(s) who prepared or approved them. This certification must be made by a licensed professional who is able to demonstrate competence in this subject area. [***62-701.730(4)(b), 62-701.510(9)(a), F.A.C.***]

BIENNIAL

20. One copy of a technical report shall be submitted to the Department every two years, and shall be updated at the time of permit renewal. The report shall summarize and interpret the water quality data and water level measurements collected during the past four years. The report shall contain, at a minimum, the following:

    a. Tabular and graphical displays of any data that shows that a monitoring parameter has been detected, including hydrographs for all monitoring wells.
    b. Trend analyses of any monitoring parameters detected.
    c. Comparisons among shallow, middle, and deep zone wells.
    d. Comparison between upgradient and downgradient wells.
    e. Correlation between related parameters such as total dissolved solids and specific conductance.
    f. Discussion of erratic and/or poorly correlated data.
    g. An interpretation of the ground water contour maps, including an evaluation of ground water flow rates.
    h. An evaluation of the adequacy of the water quality monitoring frequency and sampling locations based upon site conditions.

    This report must be signed and sealed pursuant to Florida Statutes (F.S.) Chapters 471 and 492 which require that documents requiring the practice of professional engineering or professional geology, as described in Chapter 471 or 492, F.S., be signed and sealed by the professional(s) who prepared or approved them. This certification must be made by a licensed professional who is able to demonstrate competence in the subject area(s) addressed within the sealed document. [***62-701.730(4)(b), 62-701.510(9)(b), F.A.C.***]

ATTACHMENT A

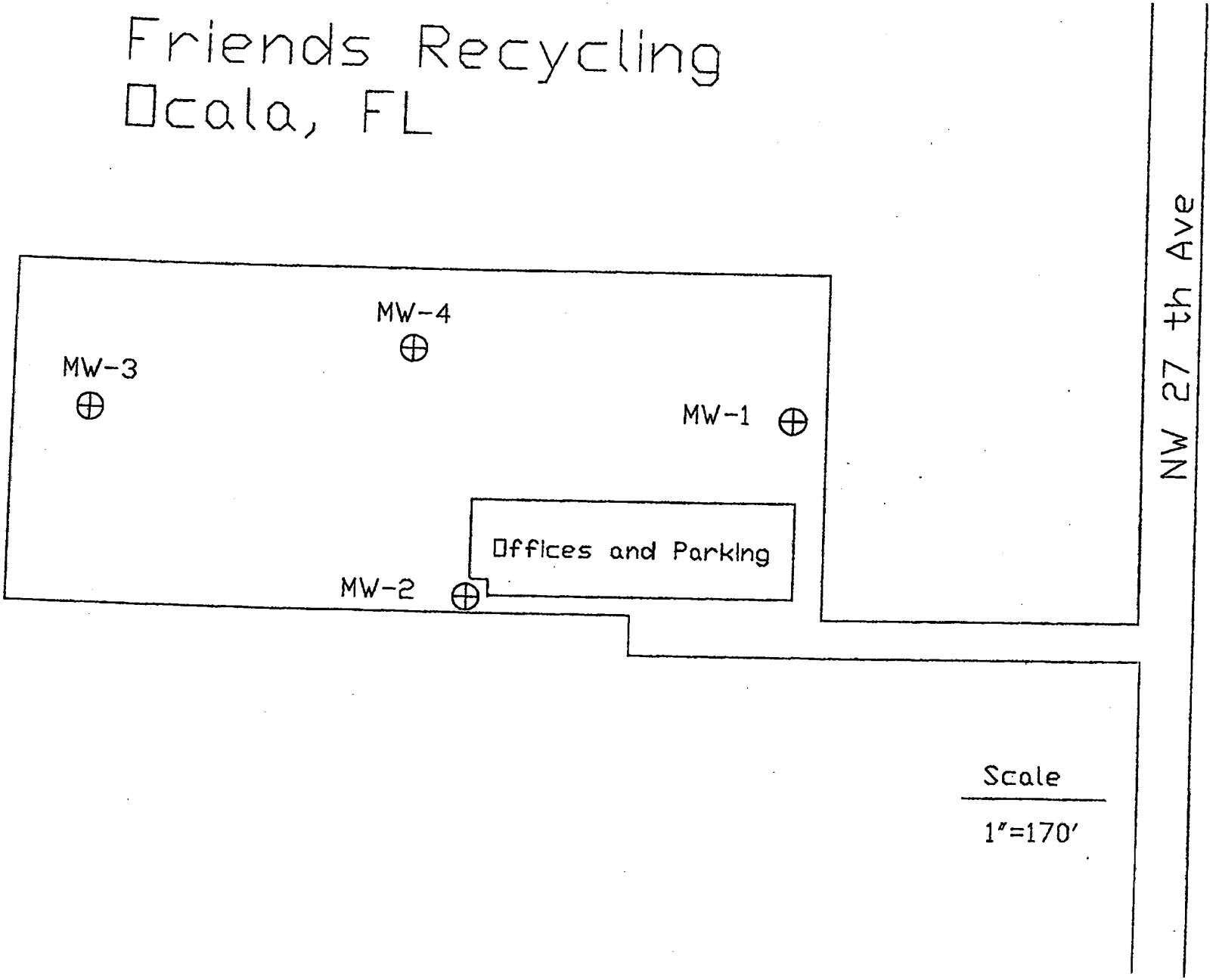
OCALA RECYCLING, LLC C&D LANDFILL
WACS_FACILITY: 21012
MONITORING SITES

MONITORING SITE_NUM	WACS_ WELL	WELL_ TYPE	ZONE/LOCATION MONITORED	GW/SW CLASS	WACS REPORT TYPE
GROUND WATER					
MW-1	18811	DE	FLORIDAN	G-II	SEMCD/RENCD
MW-2	19649	DE	FLORIDAN	G-II	SEMCD/RENCD
MW-3	18813	DE	FLORIDAN	G-II	SEMCD/RENCD
MW-4	18814	DE	FLORIDAN	G-II	SEMCD/RENCD

Well Type Codes
(DG) Downgradient
(SO) Source
(AS) Assessment
(IM) Intermediate
(UP) Upgradient
(BG) Background
(IW) Irrigation Well
(WS) Water supply
(CO) Compliance
(OT) Other
(DE) Detection
(PZ)Piezometer

04/26/05

Friends Recycling
Ocala, FL



ATTACHMENT B

FRIENDS RECYCLING LLC-C & D DISPOSAL AND RECYCLING

PARAMETER MONITORING REPORT
Rule 62-701.730(2)(b)
WACS Report Type: SEMCD
Semi-annual Ground Water Monitoring (Page 1 of 3)

WACS_FACILITY 21012 _____ SAMPLING DATE/TIME _____

WACS_WELL _____ SAMPLING METHOD _____

MONITORING_SITE_NUM _____

Ground water classification: G-II

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

PERMITTED: ___ (AS) Assessment (IW) Irrigation Well
WELL TYPE (BG) Background (OT) Other
(CO) Compliance (PZ) Piezometer
(DE) Detection (SO) Source
(DG) Downgradient (UP) Upgradient
(IM) Intermediate (WS) Water supply

STORET CODE	PARAMETER MONITORED	ANALYSIS DATE	FIELD FILTERED (Y/N)	PRESERV. INTACT (Y/N)	ANALYSIS METHOD	ANALYSIS RESULT	DETECTION LIMIT	UNITS	QUALIFIER
082545	Water Level							Ft NGVD	
000010	Temperature (field)							°C	
000299	Dissolved Oxygen (field)							Mg/L	
000406	pH (field)							STD	
000094	Spec. Conductance (field)							Umhos/cm	
082078	Turbidity (field)							NTU's	
000610	Total Ammonia as N							Mg/L	
000940	Chlorides							Mg/L	
000620	Nitrate as N							Mg/L	
032730	Phenols							Ug/L	
000945	Sulfate							Mg/L	
070300	Total Dissolved Solids							Mg/L	
	METALS								
001105	Aluminum							Ug/L	
001002	Arsenic							Ug/L	
001027	Cadmium							Ug/L	
001034	Chromium							Ug/L	
001045	Iron							Ug/L	
001051	Lead							Ug/L	
071900	Mercury							Ug/L	
000929	Sodium							Mg/l	
	EPA METHOD 601								
032101	Bromodichloromethane							Ug/L	

FRIENDS RECYCLING LLC-C & D DISPOSAL AND RECYCLING

PARAMETER MONITORING REPORT

Rule 62-701.730(2)(b)

WACS Report Type: SEMCD

Semi-annual Ground Water Monitoring (Page 2 of 3)

WACS_FACILITY 21012 _____ SAMPLING DATE/TIME _____

WACS_WELL _____ SAMPLING METHOD _____

MONITORING_SITE_NUM _____

Ground water classification: G-II

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

PERMITTED: ___ (AS) Assessment (IW) Irrigation Well
WELL TYPE (BG) Background (OT) Other
(CO) Compliance (PZ) Piezometer
(DE) Detection (SO) Source
(DG) Downgradient (UP) Upgradient
(IM) Intermediate (WS) Water supply

STORET CODE	PARAMETER MONITORED	ANALYSIS DATE	FIELD FILTERED (Y/N)	PRESERV. INTACT (Y/N)	ANALYSIS METHOD	ANALYSIS RESULT	DETECTION LIMIT	UNITS	QUALIFIER
032104	Bromoform							Ug/L	
032102	Carbon Tetrachloride							Ug/L	
034301	Chlorobenzene							Ug/L	
034311	Chloroethane							Ug/L	
034576	2-Chloroethyl vinyl ether							Ug/L	
032106	Chloroform							Ug/L	
032105	Dibromochloromethane							Ug/L	
034536	1,2-Dichlorobenzene							Ug/L	
034566	1,3-Dichlorobenzene							Ug/L	
034571	1,4-Dichlorobenzene							Ug/L	
034668	Dichlorodifluoromethane							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	
034541	1,2-dichloropropane							Ug/L	
034704	cis-1,3-Dichloropropene							Ug/L	
034699	trans-1,3-Dichloropropene							Ug/L	
034413	Methyl Bromide							Ug/L	
034418	Methyl Chloride							Ug/L	
034423	Methylene Chloride							Ug/L	
034516	1,1,2,2-Tetrachloroethane							Ug/L	

FRIENDS RECYCLING LLC-C & D DISPOSAL AND RECYCLING

PARAMETER MONITORING REPORT

Rule 62-701.730(2)(b)

WACS Report Type: SEMCD

Semi-annual Ground Water Monitoring (Page 3 of 3)

WACS_FACILITY 21012 _____ SAMPLING DATE/TIME _____

WACS_WELL _____ SAMPLING METHOD _____

MONITORING_SITE_NUM _____

Ground water classification: G-II

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

PERMITTED: ___ (AS) Assessment (IW) Irrigation Well
WELL TYPE (BG) Background (OT) Other
(CO) Compliance (PZ) Piezometer
(DE) Detection (SO) Source
(DG) Downgradient (UP) Upgradient
(IM) Intermediate (WS) Water supply

STORET CODE	PARAMETER MONITORED	ANALYSIS DATE	FIELD FILTERED (Y/N)	PRESERV. INTACT (Y/N)	ANALYSIS METHOD	ANALYSIS RESULT	DETECTION LIMIT	UNITS	QUALIFIER
034475	Tetrachloroethene							Ug/L	
034506	1,1,1-Trichloroethane							Ug/L	
034511	1,1,2-Trichloroethane							Ug/L	
039180	Trichloroethene							Ug/L	
034488	Trichlorofluoromethane							Ug/L	
039175	Vinyl Chloride							Ug/L	
	EPA METHOD 602								
034030	Benzene							Ug/L	
034371	Ethylbenzene							Ug/L	
034010	Toluene							Ug/L	
034020	Xylenes							Ug/L	

FRIENDS RECYCLING LLC-C & D DISPOSAL AND RECYCLING

PARAMETER MONITORING REPORT

Rule 62-701.730(2)(b)

WACS Report Type: RENCD

Permit Renewal Ground Water Monitoring (Page 1 of 4)

WACS_FACILITY 21012

SAMPLE DATE/TIME _____

WACS_WELL _____

SAMPLING METHOD _____

MONITORING_SITE_NUM _____

Ground water classification: G-II

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

PERMITTED: ___ (AS) Assessment (IW) Irrigation Well
WELL TYPE (BG) Background (OT) Other
(CO) Compliance (PZ) Piezometer
(DE) Detection (SO) Source
(DG) Downgradient (UP) Upgradient
(IM) Intermediate (WS) Water supply

STORET CODE	PARAMETER MONITORED	ANALYSIS DATE	FIELD FILTERED (Y/N)	PRESERV. INTACT (Y/N)	ANALYSIS METHOD	ANALYSIS RESULT	DETECTION LIMIT	UNITS	QUALIFIER
082545	Water Level							Ft NGVD	
000010	Temperature (field)							°C	
000299	Dissolved Oxygen (field)							Mg/L	
000406	pH (field)							STD	
000094	Spec. Conductance (field)							Umhos/cm	
082078	Turbidity (field)							NTU's	
000610	Total Ammonia as N							Mg/L	
000940	Chlorides							Mg/L	
000620	Nitrate as N							Mg/L	
000945	Sulfate							Mg/L	
032730	Phenols							Ug/L	
070300	Total Dissolved Solids							Mg/L	
	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	

FRIENDS RECYCLING LLC-C & D DISPOSAL AND RECYCLING

PARAMETER MONITORING REPORT

Rule 62-701.730(2)(b)

WACS Report Type: RENCD

Permit Renewal Ground Water Monitoring (Page 2 of 4)

WACS_FACILITY 21012 _____ SAMPLE DATE/TIME _____

WACS_WELL _____ SAMPLING METHOD _____

MONITORING_SITE_NUM _____

Ground water classification: G-II

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

PERMITTED: ___ (AS) Assessment (IW) Irrigation Well
WELL TYPE (BG) Background (OT) Other
(CO) Compliance (PZ) Piezometer
(DE) Detection (SO) Source
(DG) Downgradient (UP) Upgradient
(IM) Intermediate (WS) Water supply

STORET CODE	PARAMETER MONITORED	ANALYSIS DATE	FIELD FILTERED (Y/N)	PRESERV. INTACT (Y/N)	ANALYSIS METHOD	ANALYSIS RESULT	DETECTION LIMIT	UNITS	QUALIFIER
071900	Mercury							Ug/l	
001067	Nickel							Ug/L	
001147	Selenium							Ug/L	
001077	Silver							Ug/L	
000929	Sodium							Mg/L	
001059	Thallium							Ug/L	
001087	Vanadium							Ug/L	
001092	Zinc							Ug/L	
	ORGANICS								
081552	Acetone							Ug/L	
034215	Acrylonitrile							Ug/L	
034030	Benzene							Ug/L	
073085	Bromochloromethane							Ug/L	
032101	Bromodichloromethane							Ug/L	
032104	Bromoform							Ug/L	
077041	Carbon Disulfide							Ug/L	
032102	Carbon Tetrachloride							Ug/L	
034301	Chlorobenzene							Ug/L	
034311	Chloroethane							Ug/L	
032106	Chloroform							Ug/L	
032105	Dibromochloromethane							Ug/L	
038437	1,2-Dibromo-3-chloropropane							Ug/L	
077651	1,2-Dibromoethane							Ug/L	

FRIENDS RECYCLING LLC-C & D DISPOSAL AND RECYCLING

PARAMETER MONITORING REPORT

Rule 62-701.730(2)(b)

WACS Report Type: RENCD

Permit Renewal Ground Water Monitoring (Page 3 of 4)

WACS_FACILITY 21012 _____ SAMPLE DATE/TIME _____

WACS_WELL _____ SAMPLING METHOD _____

MONITORING_SITE_NUM _____

Ground water classification: G-II

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

PERMITTED: ___ (AS) Assessment (IW) Irrigation Well
WELL TYPE (BG) Background (OT) Other
(CO) Compliance (PZ) Piezometer
(DE) Detection (SO) Source
(DG) Downgradient (UP) Upgradient
(IM) Intermediate (WS) Water supply

STORET CODE	PARAMETER MONITORED	ANALYSIS DATE	FIELD FILTERED (Y/N)	PRESERV. INTACT (Y/N)	ANALYSIS METHOD	ANALYSIS RESULT	DETECTION LIMIT	UNITS	QUALIFIER
034536	1,2-Dichlorobenzene							Ug/L	
034571	1,4-Dichlorobenzene							Ug/L	
049263	trans-1,4-Dichloro-2-butene							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	
034541	1,2-Dichloropropane							Ug/L	
034704	cis-1,3-Dichloropropene							Ug/L	
034699	trans-1,3-Dichloropropene							Ug/L	
034371	Ethylbenzene							Ug/L	
034413	Methyl bromide							Ug/L	
077103	Methyl butyl ketone							Ug/L	
034418	Methyl chloride							Ug/L	
081595	Methyl ethyl ketone							Ug/L	
077424	Methyl iodide							Ug/L	
077596	Methylene bromide							Ug/L	
034423	Methylene chloride							Ug/L	
081596	Methyl isobutyl ketone							Ug/L	
077128	Styrene							Ug/L	
077562	1,1,1,2-Tetrachloroethane							Ug/l	
034516	1,1,2,2-Tetrachloroethane							Ug/L	

FRIENDS RECYCLING LLC-C & D DISPOSAL AND RECYCLING

PARAMETER MONITORING REPORT

Rule 62-701.730(2)(b)

WACS Report Type: RENCD

Permit Renewal Ground Water Monitoring (Page 4 of 4)

WACS_FACILITY 21012 _____ SAMPLE DATE/TIME _____

WACS_WELL _____ SAMPLING METHOD _____

MONITORING_SITE_NUM _____

Ground water classification: G-II

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

PERMITTED: ___ (AS) Assessment (IW) Irrigation Well
WELL TYPE (BG) Background (OT) Other
(CO) Compliance (PZ) Piezometer
(DE) Detection (SO) Source
(DG) Downgradient (UP) Upgradient
(IM) Intermediate (WS) Water supply

STORET CODE	PARAMETER MONITORED	ANALYSIS DATE	FIELD FILTERED (Y/N)	PRESERV. INTACT (Y/N)	ANALYSIS METHOD	ANALYSIS RESULT	DETECTION LIMIT	UNITS	QUALIFIER
034475	Tetrachloroethene							Ug/L	
034010	Toluene							Ug/L	
034506	1,1,1-Trichloroethane							Ug/L	
034511	1,1,2-Trichloroethane							Ug/L	
039180	Trichloroethene							Ug/L	
034488	Trichlorofluoromethane							Ug/L	
077443	1,2,3-Trichloropropane							Ug/L	
077057	Vinyl Acetate							Ug/L	
039175	Vinyl Chloride							Ug/L	
034020	Xylenes							Ug/L	

Florida Department of Environmental Protection

3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-3767

MONITORING WELL COMPLETION REPORT

DATE: _____

FACILITY NAME: Friends Recycling LLC-C&D Disposal and Recycling

DER PERMIT NO.: _____ WACS_FACILITY: 12012

WACS MONITORING SITE_NUM.: _____ WACS_WELL: _____

WELL_TYPE: BACKGROUND _____ DETECTION _____ COMPLIANCE _____

LATITUDE AND LONGITUDE (seconds to two decimal places): _____

AQUIFER MONITORED: _____

DRILLING METHOD: _____ DATE INSTALLED: _____

INSTALLED BY: _____

BORE HOLE DIAMETER: _____ TOTAL DEPTH: _____(BLS)

CASING TYPE: _____ CASING DIAMETER: _____ CASING LENGTH: _____

SCREEN TYPE: _____ SCREEN SLOT SIZE: _____ SCREEN LENGTH: _____

SCREEN DIAMETER: _____ SCREEN INTERVAL: _____ TO _____(BLS)

FILTER PACK TYPE: _____ FILTER PACK GRAIN SIZE: _____

INTERVAL COVERED: _____ TO _____(BLS)

SEALANT TYPE: _____ SEALANT INTERVAL: _____ TO _____(BLS)

GROUT TYPE: _____ GROUT INTERVAL: _____ TO _____(BLS)

TOP OF CASING ELEVATION (NGVD): _____ GROUND SURFACE ELEVATION (NGVD): _____

DESCRIBE WELL DEVELOPMENT: _____

_____

_____

POST DEVELOPMENT WATER LEVEL ELEVATION (NGVD): _____

DATE AND TIME MEASURED: _____

REMARKS: _____

_____

NAME OF PERSON PREPARING REPORT: _____

_____

(Name, Organization, Phone No., E-mail)

NOTE ATTACH AS-BUILT MW CONSTRUCTION DIAGRAM AND LITHOLOGIC LOG.
(NGVD) NATIONAL GEODETIC VERTICAL DATUM OF 1929 (BLS) = BELOW LAND SURFACE

DEP Form 62-522.900(3) Effective April 14, 1994

Florida Department of Environmental Protection

3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-3767

GROUND WATER MONITORING REPORT

Rule 62-522.600(11)

PART I GENERAL INFORMATION

(1) Facility Name Friends Recycling LLC-C&D Disposal and Recycling

Address _____

City _____ Zip _____ County _____

Telephone Number (____) _____ E-mail address _____

(2) WACS_Facility 21012

(3) DEP Permit Number _____

(4) Authorized Representative's Name _____ Title _____

Address _____

City _____ Zip _____ County _____

Telephone Number (____) _____ E-mail address _____

(5) Type of Discharge _____

(6) Method of Discharge _____

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submission of false information including the possibility of fine and imprisonment.

_____ _____

Date Owner or Authorized Representative's Signature

PART II QUALITY ASSURANCE REQUIREMENTS

Sampling Organization Comp QAP # _____

Analytical Lab Comp QAP #/ HRS Certification _____

Lab Name _____

Address _____

Phone Number (____) _____

E-mail Address _____

DEP-SOP-001/01
FS 2200 Groundwater Sampling
Form FD 9000-24

GROUNDWATER SAMPLING LOG

FACILITY NAME: Friends Recycling LLC-C&D Disposal and Recycling	FACILITY LOCATION:	
MONITORING_SITE_NUM:	WACS_WELL:	DATE:

PURGING DATA

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
only fill out if applicable)
= (feet – feet) X gallons/foot = gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/cm or µS/cm)	DISSOLVED OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION:	SAMPLER(S) SIGNATURES:	SAMPLING INITIATED AT:	SAMPLING ENDED AT:
PUMP OR TUBING DEPTH IN WELL (feet):	SAMPLE PUMP FLOW RATE (mL per minute):	TUBING MATERIAL CODE:	
FIELD DECONTAMINATION: Y N	FIELD-FILTERED: Y N FILTER SIZE: ____ µm Filtration Equipment Type: _____	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH		

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING/PURGING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **VT** = Vacuum Trap; **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.

2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)

pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 1, 2004