

DENR USE ONLY:
NC DENR

Paper Report Electronic Data - Email CD (data loaded: Yes / No)

Doc/Event #:

Division of Waste Management - Solid Waste

Environmental Monitoring Reporting Form

Notice: This form and any information attached to it are "Public Records" as defined in NC General Statute 132-1. As such, these documents are available for inspection and examination by any person upon request (NC General Statute 132-6).

Instructions:

- Prepare one form for each individually monitored unit.
- Please type or print legibly.
- Attach a notification table with values that attain or exceed NC 2L groundwater standards or NC 2B surface water standards. The notification must include a preliminary analysis of the cause and significance of each value. (e.g. naturally occurring, off-site source, pre-existing condition, etc.).
- Attach a notification table of any groundwater or surface water values that equal or exceed the reporting limits.
- Attach a notification table of any methane gas values that attain or exceed explosive gas levels. This includes any structures on or nearby the facility (NCAC 13B .1629 (4)(a)(i)).
- Send the original signed and sealed form, any tables, and Electronic Data Deliverable to: Compliance Unit, NCDENR-DWM, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27699-1646.

Solid Waste Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

C. T. Clayton, Sr., PE, Inc. (Consultant)

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: C. Tyrus Clayton, Jr., PE

Phone: 910-897-7070

E-mail: tyrus@ctclayton.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Dunn/Erwin Landfill	SR1725 Dunn, NC	43-02	.1600	October 26-27, 2012

Environmental Status: (Check all that apply)

- Initial/Background Monitoring Detection Monitoring Assessment Monitoring Corrective Action

Type of data submitted: (Check all that apply)

- Groundwater monitoring data from monitoring wells Methane gas monitoring data
 Groundwater monitoring data from private water supply wells Corrective action data (specify) Background sampling completed
 Leachate monitoring data Other(specify) _____
 Surface water monitoring data

Notification attached?

- No. No groundwater or surface water standards were exceeded.
 Yes, a notification of values exceeding a groundwater or surface water standard is attached. It includes a list of groundwater and surface water monitoring points, dates, analytical values, NC 2L groundwater standard, NC 2B surface water standard or NC Solid Waste GWPS and preliminary analysis of the cause and significance of any concentration.
 Yes, a notification of values exceeding an explosive methane gas limit is attached. It includes the methane monitoring points, dates, sample values and explosive methane gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significance of concentrations exceeding groundwater standards. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

C. Tyrus Clayton, Jr., PE

Consultant

(910) 897-7070

Facility Representative Name (Print)

Title

(Area Code) Telephone Number

Digitally signed by C. Tyrus Clayton, Jr., PE
DN: cn=C. Tyrus Clayton, Jr., PE, o=C. T. Clayton, Sr., PE, Inc., ou,
email=tyrus@ctclayton.com, c=US
Date: 2012.03.20 09:01:28 -0400

3-20-2012

Affix NC Licensed/ Professional Geologist Seal

Signature

Date

46 West Washington St, Coats NC 27521

Facility Representative Address

C-2570

NC PE Firm License Number (if applicable effective May 1, 2009)



March 16, 2012

Ms. Elizabeth Werner
Solid Waste Section
Division of Waste Management
North Carolina Department of Environment and Natural Resources
Mail Service Center 1646
Raleigh, NC 27699-1646

**RE: SEMI-ANNUAL GROUNDWATER MONITORING: OCTOBER 2011
DUNN-ERWIN MUNICIPAL SOLID WASTE LANDFILL, PERMIT 43-02
HARNETT COUNTY, NORTH CAROLINA**

Dear Ms. Werner:

On behalf of Harnett County, C.T. Clayton, Sr., PE, Inc. (CTC) is pleased to herewith submit the results of the semi-annual groundwater monitoring event of October 2011 performed at the Dunn-Erwin Municipal Solid Waste Landfill in accordance with North Carolina Solid Waste Management Rules 15A N.C.A.C. 13 B, .1633 and .1634. The findings and conclusions of this report will be considered by Harnett County for the assessment of the Harnett County's Corrective Action Plan (CAP) for the groundwater contamination plume, downgradient of the existing landfill in accordance with North Carolina Solid Waste Management Rules 15A N.C.A.C. 13B, .1635, .1636, and .1637, and 15A N.C.A.C. 13B .0547.

The report is organized in sections entitled Executive Summary, Introduction, Groundwater Levels, and Results. As allowed under the Rule revisions, statistically analysis is no longer required and will only be used in selected cases as discussed in the Executive Summary.

Should you have any questions or comments, please contact me at our address shown above or by e-mail at tyrus@ctclayton.com.

Sincerely,

C. T. CLAYTON, SR., P.E., INC.

A handwritten signature in black ink, appearing to read "C. Tyrus Clayton, Jr.", is written over the typed name.

C. Tyrus Clayton, Jr., P.E.

cc. Jerry Blanchard - Harnett County
C. T. Clayton, Sr., P.E.
C. J. Poran, PE - ENSOL, Inc.

/attachments

**SEMI-ANNUAL GROUNDWATER MONITORING REPORT
OCTOBER 2011
DUNN-ERWIN MUNICIPAL SOLID WASTE LANDFILL
PERMIT #43-02
HARNETT COUNTY, NORTH CAROLINA**

Submitted to:
**Solid Waste Section
Division of Waste Management
NCDENR
1646 Mail Service Center
Raleigh, NC 27699-1646**

Submitted by:
**C.T. Clayton, Sr., P.E., Inc.
46 W. Washington Street
Coats, NC 27521**

Submitted on behalf of:
**Harnett County General Services
P.O. Box 940
Lillington, NC 27546**

March 16, 2012

TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
I. INTRODUCTION.....	1
II. GROUNDWATER LEVELS	1
III. RESULTS	2
Set 1 Upgradient Monitoring Wells:	4
Downgradient Monitoring Wells:	7
Set 2 Upgradient Monitoring Well:.....	21
Downgradient Monitoring Wells:	22
Set 3 Upgradient Surface Water Point:	24
Downgradient Surface Water Points:	25

TABLES

1. Groundwater Levels Within Monitoring Wells
2. Groundwater Velocity Data
3. Notification Table for Values Exceeding 2L NCGS or 13B GPS
4. Analysis of Organic Detections in Downgradient Monitoring Wells
5. Comparison of 2L NCGS, 13B GPS, SWSL, Current and Historic Detection Limits

FIGURES

1. Contaminant Plume Assessment
2. Site Layout and Monitoring Well Locations
3. Top Organic Detections in Downgradient Wells per Sampling Event

APPENDICES

- | | |
|------------|---|
| APPENDIX A | Data Set 1:
- Individual MW Summary Tables |
| APPENDIX B | Data Set 2:
- Individual MW Summary Tables
- Excel Results: Test of Proportions |
| APPENDIX C | Data Set 3:
- Individual SWPT Summary Tables |
| APPENDIX D | Laboratory Data and Chain of Custody Forms |
| APPENDIX E | Statistical Analysis Methodology |

EXECUTIVE SUMMARY

The October 2011 groundwater sampling event performed at the Dunn-Erwin Municipal Solid Waste Landfill (MSWLF) fulfilled the County's semi-annual groundwater sampling and analyses requirements in accordance with North Carolina Solid Waste Management Rules *15A NCAC 13B .1633* and *1634*. Figures 1, 2A and 2B show the facility layout and various groundwater monitoring wells and piezometers locations, respectively.

Previously, an extensive study was completed in order to better understand the groundwater contamination plume at the site, as described in the report dated August 25, 2003, including the field investigation performed in October 2002 in conjunction with the scheduled October 2002 semi-annual sampling event. Also, 12 new observation wells were installed in the general area of the groundwater contamination plume during this field investigation. The field investigation was followed by additional laboratory testing, and an extensive analysis and computer modeling. Results from that study have been incorporated in this report also including the October 2002 delineation of the groundwater contaminant plume in the uppermost aquifer, downgradient of the MSWLF.

Several new wells (MW11, MW12, MW13, MW14, and MW15) and piezometers (PZ-50, PZ-51, PZ-52, and PZ-53) have been installed and are associated with the proposed new construction and demolition debris (C&D) landfill in the southwest of the groundwater contaminant plume area. The wells were added prior to the May 2007 sampling event, while the piezometers were added prior to the October 2010 sampling event. A new surface water sampling point, SWPT4, was added as of the April 2010 monitoring event, also associated with the C&D landfill.

As of April 1, 2011, several NC SWS Regulations have been revised, including *15 NCAC 13B.1632*, *1633*, *1634*, *1635*, and *1637*. As before, the regulations require groundwater sampling, beginning with a semi-annual detection monitoring program for Appendix I constituents (subpart *1633*). If an Appendix I constituent exceeds a groundwater protection standard as defined in subparts *1634(g)* or *1634(h)*, then an assessment monitoring program is required, including Appendix II constituents (which also include Appendix I constituents). If an Appendix II constituent exceeds groundwater protection standards, then the owner is required to proceed with corrective action (CA) following subparts *1635* and *1637*. The changes do not appear to affect the need for continued assessment monitoring and CA at Dunn-Erwin.

The revisions do have a substantial impact on reporting and data evaluation. Statistical analysis (SA) is no longer required. The owner may still choose to perform SA in order to establish background levels and to determine if a particular detection represents a statistically significant increase over background levels (SSIOBL) which would be considered if it also represents an exceedance of the respective groundwater protection standard. Since SA is no longer required, the benefit to conducting SA would be to demonstrate that a particular detection that exceeds a groundwater protection standard is not above background and does not require CA.

However, CA is currently underway at the Dunn-Erwin MSWLF. According to the current regulations, CA is deemed complete only after Appendix II levels are below groundwater protection standards for three (3) consecutive years. Therefore, based on the new regulations, continued use of SA in the affected CA wells appears unnecessary at this time since it does not appear to provide significant benefit to the assessment.

In the past, SA has been used for every detection. Many detections, particularly inorganic, did not exceed groundwater protection standards. Results that have historically exceeded groundwater protection standards are typically limited to wells within the CA area. An occasional inorganic was detected at a concentration that exceeded the respective groundwater protection standard in other locations of the DELF, outside of the CA area. Until CA has been completed and the MSWLF reverts to its groundwater sampling program, SA will only be used for inorganic detections that exceed a groundwater protection standard outside of the CA area to confirm if the detected levels are (or are not) statistically significantly over background levels (i.e., require CA). SA will not be used for wells currently included in CA. The effectiveness of CA will be assessed based on the observed quantitative decrease in detection results that exceed groundwater protection standards. The use of SA will be reevaluated after CA has been completed.

Historically, data from the semi-annual sampling were evaluated in sets. Data will continue to be organized by these sets, should SA be necessary. Set 1 consists of wells monitoring the previously closed (December 1998) solid waste landfill portion of the site where active construction and demolition debris (C&D) placement is ongoing, including monitoring wells (MWs) MW1, MW2, MW3R, MW4, MW5, MW6B, MW7B, MW8, and MW31. Monitoring well MW3, which was previously damaged during site operations prior to April 2005 sampling event has been replaced by MW3R as of June 2005. The casing for MW4 has been extended to account for flooding in the area. Monitoring well MW6 has also been replaced with MW6B, installed adjacent to the previous location. Due to the proximity of the replacement well to the original location, background monitoring is not planned for MW6B. Monitoring wells MW9 and MW10 were installed in March 2001 and were added to Data Set 1 as of April 2001.

In 2006, five (5) new MWs (MW11 - MW15) were installed in conjunction with the proposed C&D landfill. These wells were added to Data Set 1 since they are downgradient of the active C&D and closed MSWLF and are considered Subset 1N. Subject to the final proposed C&D landfill design and groundwater monitoring plan, one of these monitoring wells may be designated as an upgradient well to the new landfill. Additionally, one or more of the related four new piezometers (PZ-50 through PZ-53) could also be converted into monitoring wells for the new landfill, as needed.

As part of the groundwater monitoring plan associated with the SWS-approved CAP (as of November 18, 2009) Harnett County has installed five (5) new monitoring wells, MW53, MW56, MW57, MW58 and MW59, downgradient of the apparent western boundary of the contamination plume as shown in Figure 2A. These wells have also been added to Data Set 1. SA, if necessary, may be used for these wells after four (4) background sampling events beginning with October 2010 are completed. Six new piezometers, PZ54 - PZ59 were also installed in this area.

Set 2 consists of wells monitoring the older closed portion of the landfill site, including MW16, MW23B, MW32, MW33, and the newer MW34 and MW35 installed in June 1996. Monitoring well MW23B has been statistically compared with Set 1 as it appears to be located downgradient of these wells.

Set 3 consists of surface water monitoring points (SWPTs) along the wetlands between the active and the closed areas, including SWPT1, SWPT2, and SWPT3. SWPT4 has been added as of the

April 2010 sampling event and will be eligible for SA within Set 3, if necessary, once four background sampling events have been completed.

Groundwater levels at all monitoring wells are also recorded, as shown in Table 1. As an overall average, groundwater levels during this latest sampling event were approximately 1.71 feet below the average groundwater level based on all sampling events, for each respective well.

As of October 2008, the groundwater elevation map (Figure 1) was updated with average contours based on data collected from January 2007 to May 2008, including data from MW11 - MW15. Table 1, Static Water Elevations, has been updated with data for MW6B, MW53, MW56-MW59, and the new casing elevation for MW4. In addition, Table 2, Groundwater Velocity Data, was updated to incorporate values for MW11 - MW15. Hydraulic conductivity testing for wells installed after MW11 - MW15 has not yet been conducted; therefore, newer wells are not included in the table which will be updated upon completion of these tests.

This report complies with the revised requirements of the Solid Waste Section (SWS), per the SWS Memoranda dated October 27, 2006, February 23, 2007, and October 16, 2007. Specifically, the Solid Waste Section Limits (SWSL) and lower Method Detection Limits (MDLs) were incorporated as of the October 2007 sampling event. The 15A NCAC 13B groundwater protection standards (GPS) are considered for those constituents that lack a 15A NCAC 02L.0202 North Carolina Groundwater Standards (NCGS).

As required by the new rules, the Environmental Monitoring Reporting Form accompanies this submittal. Table 3 serves as the notification table required with this form and includes results which exceed a 2L NCGS or a 13B GPS. Because some of the SWSLs are greater than the NCGS or GPS, estimated values which exceed NCGS or GPS are included in Table 3. GPS have been included with NCGS in the historic summary tables in the Appendices for detections above the SWSL. However, these tables do not include the estimated detections below the SWSL and are not intended to be an exhaustive comparison to NCGS and GPS. For a complete listing of estimated concentrations, refer to the laboratory reports in Appendix D.

The new MDLs are significantly less than previous detection limits. The SWSLs are more similar to the previous detection limits but are lower for several constituents. Table 5 of this report provides a comprehensive comparison of 2L NCGS, 13B GPS, SWSL, and current and historical (2006) MDLs for constituents commonly detected at the Dunn-Erwin landfill. When compared to historical detection limits, the use of the generally lower SWSLs has resulted in an increase in the number of reported detections. Because historic data, including background sampling, was reported using much higher detection limits, estimated values are not incorporated into the SA, where utilized, except for the prediction interval intra-well comparison as discussed in Appendix E. Only results exceeding SWSLs are included in SA and presented in the summary tables found in Appendices A-C, as the SWSLs allow for a more consistent comparison of current and historical data.

This report incorporates the latest revisions NCGS and the GPS. Historical data have been comprehensively re-evaluated taking into consideration the revised NCGS or GPS. Historic **detections** were compared to the latest revisions with exceedances highlighted in the data set tables and listed in this text. However, historic *estimated* concentrations which were **below previous GPS**, but **may exceed GPS of the latest revisions**, were not reconsidered.

The following inorganics exceeded NCGS or GPS during this sampling event in Set 1, representing an overall increase of inorganic concentrations exceeding NCGS or GPS compared to the April 2011 results: beryllium at MW14, chromium at MW57, MW58, and MW59; cobalt in MW2 - MW8, MW12 - MW14, and MW53 - MW59; lead in MW7B, MW57, and MW59; thallium in MW4, MW6B, and MW7B; and vanadium in all wells sampled in the set except for MW11. With the exception of concentrations of chromium, cobalt and lead in the corrective action area (MW6B, MW7B, MW57, MW58 and/or MW59), inorganic exceedances were estimated concentration values, assumed to be background, and are not further evaluated using SA. The beryllium level at MW14 appears to be background as SA indicated it was not SSI OBL. It should also be noted that MW9, MW10, and MW15 were not sampled in October 2011 as these wells did not produce sufficient groundwater for purging and sample collection. The replacement of these wells may be considered if this problem persists.

The following organics exceeded NCGS or GPS during this sampling event in Set 1: benzene, 1,4-dichlorobenzene, 1,1-dichloroethane, 1,2-dichloroethane (*estimated*), methylene chloride, tetrachloroethylene, trichloroethylene, and vinyl chloride. Exceedances were limited to wells MW6B, MW7B, MW8, and MW53, which are within the CA area and would not benefit from further SA at this time. Overall, concentrations were similar to the results of the April 2011 sampling event.

For Set 2 inorganics, only barium was detected, at a concentration less than the NCGS, representing a decrease in inorganic levels compared to the last sampling event. No organics were detected in October 2011, consistent with the results from recent sampling events.

In Set 3, only SWPT3 was sampled, as sampling at SWPT1, SWPT2 and SWPT4 was not possible due to dry conditions. Barium and zinc were detected, both at concentrations below NCGS. Cobalt and lead exceeded GPS with estimated concentrations during this sampling event. SA was not utilized for the estimated concentrations as these estimated detections are considered background levels based on historical data.

Details of the statistical procedures, where utilized, are included in Appendix E. The results of the October 2011 sampling event are summarized and discussed for each constituent detected over the SWSL at each monitoring well or surface water monitoring point in Section III, entitled Results. Appendices A, B, C contain tabulated data for the individual wells with computer-generated results of the statistical analyses performed. Laboratory results with chain of custody forms are included in Appendix C. Based on evaluation of the current data and the August 2003 detailed plume investigation report, the following conclusions regarding groundwater contamination and future monitoring at the Dunn-Erwin MSWLF are presented:

- The previously active portion of the Dunn-Erwin solid waste landfill is now closed with a final cap. C&D waste is being placed on the cap area, as per SWS approval. Detected parameters are compared with North Carolina Groundwater Standards (NCGS) and undergo statistical analysis, as appropriate.
- Harnett County has begun the implementation of corrective action program according to North Carolina Solid Waste Management Rules 15A N.C.A.C. 13 B, .1637, as per SWS review and approval. A Corrective Action Plan, dated December 2008, with revisions in

February 2009 and October 2009, has been approved by the Solid Waste Section (SWS). A leachate management system was approved per the SWS review letter dated November 17, 2009. Groundwater extraction and phytoremediation were approved per the SWS review letter dated November 18, 2009.

- Harnett County continues groundwater Assessment Monitoring in accordance with North Carolina Solid Waste Management Rule 15A N.C.A.C. 13 B, .1634. The findings and conclusions of this report will be considered by Harnett County for the assessment of CAP for the groundwater contamination plume, downgradient of the existing landfill implemented by Harnett County in accordance with North Carolina Solid Waste Management Rules 15A N.C.A.C. 13B, .1635, .1636, and .1637, and 15A N.C.A.C. 13B .0547.
- Based on updated groundwater analytical data accumulated since October 1994 from the scheduled semi-annual sampling events, the top four organic contaminants most frequently detected in downgradient monitoring wells at concentrations that consistently have exceeded NCGS include 1,1-dichloroethane, methylene chloride, tetrachloroethylene, and trichloroethylene. Prior to this event and since October 2003, benzene had been detected in the downgradient plume only in MW9 (both results occurring during the 2006 events). However, benzene detections have increased over recent sampling events. The prevalence of benzene detections will be observed in future sampling events.
- Three of the organics mentioned in the previous paragraph, 1,1-dichloroethane, methylene chloride and trichloroethylene, were previously considered statistically significant in the semi-annual assessments. Historically, only methylene chloride had been consistently detected in average concentrations that are about one order of magnitude greater than NCGS. Therefore, methylene chloride was considered the key organic constituent in the groundwater contamination plume, downgradient of the MSWLF. With the 2010 revisions to the NCGS, the average concentrations compared to NCGS for 1,1-dichloroethane are now very similar to the ratio for methylene chloride, so going forward **both 1,1-dichloroethane and methylene chloride** are now considered as a key constituents in the CAP assessment.
- With 10 detections as of the October 2007 sampling event (including past events), vinyl chloride has qualified for inclusion into the contamination plume review starting October 2007. Vinyl chloride detections continued in April 2011. However, vinyl chloride results **are not** as prevalent as the other top organic contaminants, and because it has a **low 2L standard** the results show apparent large average concentration-to-NCGS ratios. It has been included in Figure 3 to observe in future events.
- As of October 1999 only wells MW6, MW7B, and MW8 had required annual sampling for Appendix II constituents while in assessment monitoring. All other monitoring wells of Set 1 were excluded from Appendix II sampling requirements based on approval of the North Carolina Solid Waste Section (SWS) from October 1999. However, the SWS requested in March 2007 that MW9 and MW10 also be added to the Appendix II testing since they are within the contaminant plume. Therefore, these five wells (MW6B, MW7, MW8, MW9,

and MW10) are sampled for Appendix II constituents in October annually, as required by the SWS.

- All active monitoring well locations in Set 1 should continue to be sampled and analyzed for Appendix I constituents semi-annually as per North Carolina Solid Waste Management Rules 15A N.C.A.C. 13 B, .1633, with the next Appendix I sampling event scheduled for April 2012.
- All active monitoring wells in Set 2 should continue to be sampled and analyzed for Appendix I organics and the eight RCRA metals semi-annually while in detection monitoring. The next sampling event should occur in April 2012.
- All active surface water point locations in Set 3 should continue to be sampled and analyzed for Appendix I constituents semi-annually as per North Carolina Solid Waste Management Rules 15A N.C.A.C. 13 B, .1633, with the next Appendix I sampling event scheduled for April 2012.
- Beginning in April 2011, tetrahydrofuran (THF) is included in the analysis for all wells of Set 1 and all SWPTs of Set 3, per the SWS Memorandum dated June 25, 2010. THF was reported at MW7B and MW8.
- October 2011 sampling results show that contaminant concentrations in wells located within the corrective action area have not decreased compared to the last sampling event.
- As per current SWS reporting requirements this submittal includes:
 - (i) Environmental Monitoring Reporting Form (hardcopy)
 - (ii) Summary Table 3 with the parameters that exceed 2L NCGS or 13B GPS in April 2011
 - (iii) A hard copy of the EXCEL sheets from the E11 lab
 - (iv) A hard copy of the complete assessment report

I. Introduction

The October 2011 groundwater sampling event performed at the Dunn-Erwin Municipal Solid Waste Landfill (MSWLF) fulfilled the County's semi-annual groundwater sampling and analyses requirements in accordance with North Carolina Solid Waste Management Rules *15A NCAC 13 B .1633* and *1634*.

Previously, an extensive study was completed in order to better understand the groundwater contamination plume at the site, as described in the report dated August 25, 2003, including the field investigation performed in October 2002 in conjunction with the scheduled October 2002 semi-annual sampling event. Also, 12 new observation wells were installed in the general area of the groundwater contamination plume during this field investigation. The field investigation was followed by additional laboratory testing, and an extensive analysis and computer modeling. Results from that study have been incorporated in this report also including the October 2002 delineation of the groundwater contaminant plume in the uppermost aquifer, downgradient of the MSWLF.

Several new wells (MW11, MW12, MW13, MW14, and MW15) and piezometers (PZ50, PZ51, PZ52, and PZ53) have been installed and are associated with the proposed new construction and demolition debris (C&D) landfill in the southwest of the groundwater contaminant plume area. The wells were added prior to the May 2007 sampling event, while the piezometers were added prior to the October 2010 sampling event. A new surface water sampling point, SWPT4, was added as of the April 2010 monitoring event, also associated with the C&D landfill.

As part of the groundwater monitoring plan associated with the SWS-approved CAP (as of November 18, 2009) Harnett County has installed (5) new monitoring wells, MW53, MW56, MW57, MW58 and MW59, downgradient of the apparent western boundary of the contamination plume as shown in Figure 2A. Six new piezometers, PZ54 - PZ59 were also installed in this area.

Conclusions and recommendations regarding subsequent sampling at the Dunn-Erwin MSWLF are presented in the Executive Summary. Figures 1, 2A and 2B show the facility layout and various groundwater monitoring wells and piezometers locations, respectively. Figure 1 also includes the downgradient area of the MSWLF with approximate contamination plume boundaries as updated in the CAP of October 2009.

II. Groundwater Levels

Table 1 shows historic groundwater levels within monitoring wells at the Dunn-Erwin landfill. Generally, groundwater levels during the October 2010 sampling event were approximately 1.71 feet below the average groundwater level based on all sampling events, for each respective well.

Table 2 shows estimated groundwater velocity data, previously calculated based on groundwater levels recorded in the October 1995 sampling event and updated to include average data from January 2007 to May 2008 for wells MW11 - MW15. Hydraulic

conductivity testing for wells installed after MW11 - MW15 has not been conducted yet; therefore, these newer wells are not included in the table. This table also incorporates an estimated range of site hydraulic conductivity and effective porosity values.

III. Results

This section reports results from the sampling event, including statistical tests performed on detected constituents greater than SWSL as of October 2007 outside of the CA plume area. A summary of upgradient wells (background wells) precedes the downgradient wells for each data set. The upgradient well summaries include a complete detection history for all sampling events per upgradient well. Downgradient well summaries include a brief detection history followed by the results of the statistical tests per detected constituent that exceeded SWSL outside of the plume.

Detections noted prior to October 2007 include all results which exceeded the historic detection limits for the respective constituents. Unless otherwise noted, a detection is now defined as a result that exceeds the SWSL as of October 2007. Estimated values (greater than the current MDL but less than the SWSL) are not listed except for some instances to compare to NCGS or GPS.

Table 3 lists parameters exceeding NCGS or GPS during this sampling event. ***Table 3 is intended to also serve as the notification table that is required with the Environmental Monitoring Reporting Form.*** To allow for a concise and legible summary, only monitoring wells with results that exceeded NCGS or GPS are listed. Results for monitoring wells or parameters not listed did not exceed NCGS or GPS. It should also be noted that Table 3 includes estimated values.

Detailed summary tables of constituent detections over the SWSL per monitoring well, recommended statistical tests per constituent, and results of the respective statistical tests when utilized are enclosed in Appendices A, B, and C for Data Sets 1, 2, and 3, respectively. Laboratory analytical data and chain of custody forms are included in Appendix D.

Additionally, Table 4 includes the analysis of cumulative results from all sampling events of the ongoing scheduled semi-annual analyses since October 1994, showing the summary of all organic detections in Data Set 1 that includes downgradient (compliance) monitoring wells MW2, MW3R, MW4, MW5, MW6B, MW7B, MW8, MW9, MW10, MW11, MW12, MW13, MW14, MW15, and MW23B.

Page 11 of 12 in Table 4 shows overall average concentration of organics detections with respect to the number of detections, and the average-concentration-to-NCGS ratio (ANR). The criteria selected to identify main organic constituents include those that had 10 or more detections with an ANR that approaches or exceeds 1.0. Vinyl chloride was added to the list of main constituents after it reached 10 detections.

In Table 4, Page 11 of 12, five organic compounds shown in bold face were identified as the top organic constituents in the groundwater contamination plume, including benzene,

1,1-dichloroethane, methylene chloride, tetrachloroethylene, trichloroethylene, and vinyl chloride. 1,1-dichloroethane had been added to this list due to its NCGS revision from 700 to 70 ug/l in 2006. Vinyl chloride had been added after it had 10 detections (as of October 2007).

An analysis to verify that these main organic constituents are consistent within the assumed area of the groundwater contamination plume was performed. The analysis included average concentration of organics detections, number of detections, and ANR values detected only in compliance wells MW6B, MW7B, MW8, MW9, and MW10, and averaged only over these five (5) wells for all sampling events since October 1994. The results shown in Table 4, Page 12 of 12 verify that the main organic constituents that had 10 or more detections with an ANR that exceeds 1.0, shown in bold face, are benzene, 1,1-dichloroethane, methylene chloride, tetrachloroethylene, trichloroethylene, and vinyl chloride.

To obtain time-line perspective of these organics detections, Figure 3 shows the average ANR values per each scheduled semi-annual sampling event in the five downgradient wells located within the estimated groundwater contamination plume area for these five organic constituents. The Figure shows that methylene chloride, 1,1-dichloroethane, trichloroethylene, and tetrachloroethylene have been detected with ANR values exceeding 1.0 since the beginning of data collection in October 1994, while benzene has only been detected with ANR values exceeding 1.0 since March 1999. Vinyl chloride shows high ANR values due to a relatively lower NCGS. It is likely the vinyl chloride detections are a result of the degradation of the larger chlorinated compounds.

Historically, methylene chloride had been detected most consistently with the highest ANR values, with a maximum of 31. Previously, methylene chloride was also the only SSIOBL organic constituent that had consistently been detected in the plume area in concentrations that exceed NCGS by about one order of magnitude. However, the NCGS for 1,1-dichloroethane was revised from 70 ug/l to 6 ug/l in 2010. As a result, the ANR values for 1,1-dichloroethane are now very similar to the ANR values for methylene chloride. With the NCGS revisions, it appears that 1,1-dichloroethane and methylene chloride can be considered the key organic constituents in this groundwater contamination plume.

ANR values for October 2011 are generally consistent as compared to the ANR values from April 2011. The comparison indicates that plume concentrations are not currently decreasing.

SET 1

Upgradient Wells (Background Wells):

MW1: MW1 is an upgradient well for MW2, MW3, MW4, MW5, MW6, MW7B, MW8, and MW23B (which is a Set 2 monitoring well). Historically, this well has shown inorganic concentrations above the detection limit for barium, beryllium, cadmium, chromium, cobalt, copper, lead, nickel, tin, vanadium, and zinc. Of these constituents, barium exceeded NCGS in one sampling event with a concentration of 1.68 mg/l in January 1995. Cadmium exceeded NCGS in one sampling event with a concentration of 0.004 mg/l in January 1995. Chromium exceeded NCGS in four sampling events with concentrations of 0.018, 0.011, 0.013, and 0.02 in January and March 1995, April 1997, and April 1998. Cobalt exceeded 13B GPS in one sampling event with a concentration of 0.016 mg/l in January 1995. Lead exceeded NCGS in five sampling events with concentrations of 0.104, 0.104, 0.02, 0.028, and 0.018 mg/l in January, March and September 1995, and April and October 1997, respectively. Vanadium exceeded 13B GPS in five sampling events with concentrations of 0.02 and 0.083 mg/l in October 1994 and January 1995, respectively, and *estimated* results of 0.9, 0.61, and 0.32 ug/l in October 2010, April 2011, and October 2011, respectively. Historically, carbon disulfide and diethylphthalate have been the only organic constituents detected in MW1. No constituents were detected at MW1 during this latest sampling event.

The following summarizes the history of detected concentrations for each metal constituent:

- barium:* Barium was detected in six sampling events for MW1 with concentrations of 0.252, 0.024, 1.68, 0.586, 0.083, and 0.1 mg/l in October and November 1994, January and March 1995, October 1997, and October 1998, respectively.
- beryllium:* Beryllium was detected in ten sampling events for MW1 with concentrations of 0.024, 0.006, 0.002, 0.002, 0.003, 0.006, 0.001, 0.004, 0.003, 0.002, 0.002, and 0.001 mg/l in January, March, and September 1995, April and October 1996, April and October 1997, April and October 1998, October 1999, and April 2002, and October 2009, respectively.
- cadmium:* Cadmium was detected in four sampling events for MW1 with concentrations of 0.0008, 0.001, 0.004, and 0.011 mg/l, in October and November 1994 and January and March 1995, respectively.
- chromium:* Chromium was detected in five sampling events with concentrations of 0.005, 0.018, 0.011, 0.013, 0.02 mg/l in October 1994, January and March 1995, April 1997, and April and October 1998, respectively.
- cobalt:* Cobalt was detected in only one sampling event for MW1 with a concentration of 0.016 mg/l in January 1995.

- copper:* Copper was detected in four sampling events for MW1 with concentrations of 0.017, 0.078, 0.018, and 0.007 mg/l in October 1994, January and March 1995, and October 1997, respectively.
- lead:* Lead was detected in six sampling events for MW1 with concentrations of 0.005, 0.104, 0.104, 0.02, 0.028, and 0.018 mg/l in October 1994 and January, March, and September 1995, and April and October 1997, respectively.
- nickel:* Nickel was detected for one sampling event in MW1 with a concentration of 0.03 mg/l in January 1995.
- vanadium:* Vanadium was detected in two sampling events for MW1 with concentrations of 0.02 and 0.083 mg/l in October 1994, and January 1995, respectively.
- zinc:* Zinc was detected in eight sampling events in MW1 with concentrations of 0.098, 0.012, 0.237, 0.038, 0.08, 0.065, 0.08, and 0.011 mg/l in October and November 1994 and January, March, and September 1995, April 1997, April 2004, and May 2007, respectively.

The following organics have been detected in MW1:

- carbon disulfide:* Carbon disulfide was detected in two sampling event in MW1 with concentrations of 20.9 and 7.4 mg/l in November 1994 and October 1999, respectively.
- diethylphthalate:* Diethylphthalate was detected in three sampling events for MW1 with concentrations of 5.3, 5.3 and 9.8 ug/l in September 1995, April 1996 and April 1997, respectively.

MW31: MW31 is a background well for MW2, MW3, MW4, MW5, MW6, MW7B, MW8 and MW23B. The detected metals in MW31 have been barium, beryllium, cadmium, chromium, cobalt, copper, lead, vanadium, and zinc. Of these, arsenic exceeded NCGS in three sampling event with concentrations of 0.055, 0.011, and 0.032 mg/l in September 1995, April 1996, and April 1997. Cadmium exceeded NCGS in three events with concentrations of 0.005, 0.003, and 0.003 in January 1995, March 1995, and September 1995, respectively. Chromium exceeded NCGS in ten events with concentrations of 0.021, 0.015, 0.021, 0.21, 0.044, 0.124, 0.06, 0.04, 0.08, and 0.1 mg/l in October and November 1994, September 1995, April 1996, April and October 1997, October 1998, and March and October 1999, respectively. Cobalt exceeded 13B GPS in two events with concentrations of 0.007 and 0.02 mg/l in January and September 1995, respectively. Lead exceeded NCGS in nine events with concentrations of 0.0052, 0.033, 0.17, 0.031, 0.088, 0.045, 0.03, 0.05, and 0.06 mg/l in January, March and September 1995, April 1996, April and October 1997, October 1998, and March and October 1999, respectively. Vanadium exceeded the 13B GPS in ten events with concentrations of 0.045, 0.026, 0.032, 0.08, 0.41, 0.087, 0.235, 0.11, 0.04, 0.13 mg/l in October and November 1994, January, March, and September 1995, April 1996, April and

October 1997, October 1998, and March 1999, respectively. Vanadium also exceeded 13B GPS in nine events with *estimated* results of 6.6, 20.7, 19.9, 6.2, 6.5, 4.3, 1.5, 14.4, and 17.2 ug/l in October 2007, April 2008, October 2008, April and October 2009, April and October 2010, and April and October 2011, respectively. There have been no detected organics in MW31. No constituents were detected at MW31 during this latest sampling event.

The following summarizes the history of detected concentrations for each metal constituent in MW31:

- arsenic:** Arsenic was detected in five sampling events for MW31 with concentrations of 0.005, 0.055, 0.011, 0.032, and 0.005 mg/l in March and September 1995 April 1996, and April and October 1997, respectively.
- barium:** Barium was detected in four sampling events for MW31 with concentrations of 0.04, 0.157, 0.097, and 0.098 mg/l in October 1994, January and March 1995, and October 1997 respectively.
- beryllium:** Beryllium was detected in four sampling events for MW31 with concentrations of 0.028, 0.006, 0.003, 0.001 and 0.005 mg/l in November 1994, September 1995, April and October 1997, and October 1999, respectively.
- cadmium:** Cadmium was detected in four sampling events for MW31 with concentrations of 0.005, 0.003, 0.003, and 0.001 mg/l in January, March, and September 1995, and April 1997, respectively.
- chromium:** Chromium was detected in nine sampling events for MW31 with concentrations of 0.021, 0.015, 0.021, 0.21, 0.044, 0.124, 0.06, 0.04, 0.01, and 0.01 mg/l in October and November 1994, January and September 1995, April 1996, April and October 1997, October 1998, October 1999, and April 2000, respectively.
- cobalt:** Cobalt was detected in two sampling events for MW31 with concentrations of 0.007 and 0.02 mg/l in January and September 1995, respectively.
- copper:** Copper was detected in eight sampling events for MW31 with concentrations of 0.011, 0.006, 0.052, 0.033, 0.017, 0.033, 0.043, and 0.06 mg/l, in October and November 1994, January, March, and September 1995, April 1996, April 1997, and October 1998, respectively.
- lead:** Lead was detected in ten sampling events for MW31 with concentrations of 0.011, 0.006, 0.052, 0.033, 0.017, 0.031, 0.088, 0.045, 0.03, 0.06, 0.014, and 0.013 mg/l, in October and November 1994, January, March, and September 1995, April 1996, April and October 1997, October 1998, October 1999, April 2008, and October 2008, respectively.

- vanadium:** Vanadium was detected for ten sampling events for MW31 with concentrations of 0.045, 0.026, 0.032, 0.08, 0.041, 0.087, 0.235, 0.11, 0.04, and 0.13 mg/l, in October and November 1994, January, March, and September 1995, April 1996, April and October 1997, October 1998, and March 1999, respectively.
- zinc:** Zinc was detected for nine sampling events in MW31 with concentrations of 0.017, 0.01, 0.027, 0.037, 0.07, 0.05, 0.04, 0.01, 0.017, and 0.01 mg/l, in October and November 1994, January, March, and September 1995, April 1996, October 1997, October 1998, October 1999, May 2007, and April 2008, respectively.

Downgradient Wells (Compliance Wells):

MW2: Compliance well MW2 has shown inorganic detections for arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, nickel, vanadium, and zinc. Of these, arsenic exceeded NCGS in one event, with a concentration of 0.033 in September 1995. Barium exceeded NCGS in one event, with a concentration of 0.82 in September 1995. Cadmium exceeded NCGS in two events, with concentrations of 0.003 and 0.004 mg/l in March and September 1995, respectively. Chromium exceeded NCGS in four events, with concentrations of 0.033, 0.02, 0.02, and 0.017 mg/l in November 1994, March and September 1995, and April 1997, respectively. Cobalt exceeded 13B GPS in four events with concentrations of 0.009, 0.01, and 0.07 mg/l in November 1994 and March and September 1995, respectively, and with *estimated* results of 1.3, 1.3, and 1.2 ug/l in October 2010, and April and October 2011. Lead exceeded NCGS in four events, with concentrations of 0.025, 0.025, 0.041, and 0.025 mg/l in November 1994 and January, March and September 1995, respectively. Vanadium exceeded the 13B GPS with concentrations of 0.24, 0.022, 0.07, 0.05 mg/l in October 1994 and January, March and September 1995, and with *estimated* results of 3.6, 0.9, 6.2, and 0.89 ug/l in October 2008, October 2010, and April and October 2011, respectively. Diethylphthalate, an Appendix II constituent not included in Appendix I, was detected in September 1995 in MW2. This was the only organic constituent detected for all sampling events in MW2. Beryllium and zinc were the only constituents detected at MW2 during this latest sampling event. Neither result exceeded NCGS or GPS and SA was not performed.

MW3R: Compliance well MW3R has replaced compliance well MW3. Groundwater data from sampling events prior to October 2005 from MW3 have been utilized to compare with the data for MW3R sampled beginning in October 2005.

Compliance well MW3 and/or MW3R previously had metal detections for barium, beryllium, cadmium, chromium, cobalt, copper, lead, vanadium, and zinc. Cadmium, exceeded NCGS in two sampling events with concentrations of 0.002 and 0.011 mg/l in November 1994 and March 1995, respectively. Chromium exceeded NCGS in one event, with a concentration of 0.014 in April 2002. Cobalt exceeded 13B GPS with concentrations of 0.005 and 0.012 mg/l in November 1994 and January 1995 and with *estimated* results of 2.6, 2.1, and 3 ug/l in October 2010 and April and October 2011, respectively. Vanadium exceeded the 13B GPS with concentrations of 0.009 and 0.07 mg/l in October 1994 and March 1995 and with

estimated results of 4.3, 1.1, 1.9, and 0.33 ug/l in October 2008, October 2010, and April and October 2011, respectively. Carbon disulfide has been the only organic constituent detected in MW3/3R. Beryllium and zinc were the only constituents detected at MW3 during this latest sampling event. Neither result exceeded NCGS or GPS and SA was not performed.

MW4: The casing for MW4 has been extended as of the October 2010 sampling event to account for flooding in the area of the well. MW4 has had a history of detections of the inorganics barium, beryllium, cadmium, chromium, cobalt, copper, lead, nickel, vanadium, and zinc. Beryllium exceeded the 13B GPS with a result of 6.0 and 7.0 ug/l in October 2008 and April 2011, respectively. Chromium exceeded NCGS in three events, with concentrations of 0.024, 0.011, and 0.03 in November 1994, October 1996 and October 1999, respectively. Cadmium has exceeded NCGS in one event with a concentration of 0.004 mg/l in March 1995. Cobalt exceeded 13B GPS with concentrations of 0.011 and 0.01 mg/l in November 1994 and October 1999, and with *estimated* results of 1.5 , 3.3, and 2 ug/l in October 2010, April 2011, and October 2011, respectively. Lead has exceeded NCGS in two events: 0.018 mg/l in both November 1994 and October 1996. Thallium exceeded the 13B GPS with an *estimated* result of 0.32 ug/l in October 2011. Vanadium exceeded the 13B GPS with concentrations of 0.034 and 0.05 mg/l in November 1994 and October 1999 and with *estimated* results of 0.7, 14.5, and 0.62 ug/l in October 2010 and April and October 2011, respectively. Carbon disulfide and diethylphthalate have been the only detected organics for MW4, however no organics were detected in this latest sampling. Beryllium and zinc were the only constituents detected at MW4 during this latest sampling event. Neither result exceeded NCGS or GPS and SA was not performed.

MW5: Compliance well MW5 had shown above the detection limit inorganic concentrations for barium, cadmium, chromium, copper, lead, nickel, vanadium, and zinc. Of these, arsenic exceeded NCGS in one sampling event with a concentration of 0.02 mg/l in April 2000. Cobalt exceeded the 13B GPS with *estimated* results of 4.7 and 2.2 ug/l in October 2010 and October 2011, respectively. Vanadium exceeded the 13B GPS with a concentration of 0.006 mg/l in October 1994 and *estimated* results of 4.0, 0.8, and 0.74 ug/l in October 2008, October 2010, and April 2011, respectively. Carbon disulfide has been the only organic constituent detected with a concentration of 30.5 and 6.4 ug/l in November 1994 and October 1999. Only barium was detected at MW5 during this latest sampling event. The result did not exceed NCGS or GPS and SA was not performed.

MW6: Compliance well MW6B has replaced compliance well MW6 as of the October 2010 sampling event. Due to the proximity of the replacement well to the original location, background monitoring is not planned for MW6B and data from MW6B will be compared to historic detections at MW6. Compliance well MW6 and/or MW6B previously had inorganic detections for arsenic, barium, cadmium, chromium, cobalt, copper, lead, mercury, nickel, vanadium, and zinc.

Cadmium has exceeded NCGS in three sampling event with concentrations of 0.005, 0.009, and 0.004 mg/l in October and November 1994 and January 1995, respectively.

Chromium has exceeded NCGS in four sampling events with concentrations of 0.033, 0.02, 0.012, and 0.017 mg/l in November 1994, April 1996, April 1997, and April 2002, respectively.

Cobalt exceeded 13B GPS in 23 events with concentrations of 0.011, 0.009, 0.01, 0.01, 0.011, 0.012, 0.013, 0.019, 0.015, 0.015, 0.019, 0.017, 0.013, 0.017, 0.016, 0.028, 0.017, 0.03, 0.027, 0.02, 0.022, 0.034, 0.029, 0.060, and 0.039 mg/l in April and October 1997, March 1999, April 2000, April and October 2001, April 2002, April 2003, October 2003, April and October 2004, April and October 2005, April and October 2006, May and October 2007, April and October 2008, April and October 2009, April and October 2010, and April 2011 and October 2011, respectively.

Lead has exceeded NCGS in six sampling events with concentrations of 0.019, 0.033, 0.037, 0.019, and 0.019 mg/l in November 1994, January and September 1995, April 1996, and April 2010, respectively.

Mercury exceeded NCGS in two sampling events with a concentration of 0.002 mg/l in October 1999.

Thallium exceeded 13B GPS with an *estimated* result of 0.35 ug/l in October 2011.

Vanadium exceeded 13B GPS with concentrations of 0.008, 0.074, 0.026, and 0.055 mg/l in October and November 1994, January 1995, and April 1996, and with *estimated* results of 7.3, 5.5, 5.6, 24.3, 6.9, 5.8, and 10.9 ug/l in October 2007, October 2008, April 2009, April and October 2010, and April and October 2011, respectively.

Zinc exceeded NCGS in one sampling event with a concentration of 91.5 mg/l in October 2004.

Barium and cobalt were the detected inorganic constituents during this latest sampling event at MW6B. Although cobalt exceeded GPS, MW6 is within the CA area and SA is not applicable at this time.

Detected organics for MW6/MW6B include acetone, benzene, bis(2-ethylhexyl)phthalate, carbon disulfide, carbon tetrachloride chlorobenzene, 1,4-dichlorobenzene, chloroethane, 1,1-dichloroethane, 1,1-dichloroethene, dichlorodifluoromethane, methylene chloride, 1,1,1-trichloroethane, trichloroethylene, vinyl chloride, and xylenes.

Benzene has exceeded NCGS in 11 sampling events with concentrations of 2.7, 3.4, 9.5, 6.1, 4.2, 4.9, 2.4, 3.3, 5.7, 5.7, and 6.7 ug/l in March and October 1999, April 2001, October 2007, April and October 2008, April 2009, April and October 2010, and April 2011, respectively.

Carbon tetrachloride exceeded NCGS in October 2009 with a concentration of 2.9 ug/L.

Chlorobenzene exceeded NCGS in October 1998 with a concentration of 70 ug/l.

Chloromethane exceeded NCGS in one sampling event with a concentration of 46 ug/l in April 2000.

1,4-dichlorobenzene has exceeded NCGS in seven sampling events with concentrations of 7.2, 6.9, 7.7, 7.4, 7, 6.8, and 8 ug/l in April 2001, October 2005, October 2007, April 2008, October 2010, and April and October 2011, respectively.

1,1-dichloroethane has exceeded NCGS in 24 sampling events with concentrations of 78.9, 51.7, 105, 87.1, 67, 66, 61, 80, 134, 160, 30.1, 88, 64, 41, 37, 27, 28, 27.7, 6.6, 18.4, 13.1, 7.4, 8.9, 33.2, 18.6, 18.4, 13.9, 22.7, 9.2, 8.4, and 6.3 ug/l in October and November 1994, January, March, and September 1995, February, April and October 1996, April and October 1997, April 1998, March and October 1999, April and October 2000, October 2001, April and October 2002, April and October 2003, April and October 2004, April and October 2005, April and October 2006, May and October 2007, April and October 2008, and October 2010, respectively.

1,1-dichloroethene has exceeded NCGS in one sampling event with a concentration of 83.2 ug/l in January 1995.

1,2-dichloroethane has exceeded 13B GPS in four sampling events with *estimated* results of 0.6, 0.4, 0.6, and 0.5 ug/l in October 2007, April 2008, October 2010, and October 2011, respectively.

Methylene chloride has exceeded NCGS in 14 sampling events with concentrations of 66, 109, 47, 37, 34.8, 28.2, 12.8, 64.5, 20.1, 12.9, 8.8, 33, 9.0, and 6.3 ug/l in October 2000, April and October 2001, April and October 2002, October 2003, April 2004, October 2005, April and October 2006, May and October 2007, October 2008, and October 2009, respectively.

Tetrachloroethylene has exceeded NCGS in 18 sampling events with concentrations of 5.3, 3.8, 5.6, 1.9, 8.2, 7.1, 6.2, 8.0, 6.9, 9.3, 4.5, 3.8, 1.8, 5.3, 4.9, 4.7, 5.9, and 6.9 ug/l in October 1994, January and March 1995, October 1999, April 2001, October 2005, April and October 2006, May and October 2007, April and October 2008, April and October 2009, April and October 2010, and April and October 2011, respectively.

Trichloroethylene has exceeded NCGS in 25 sampling events with concentrations of 8.4, 6.7, 10.6, 8.8, 7.2, 6.8, 11, 9.9, 8.7, 7.0, 17, 5.4, 5.2, 8.8, 7.1, 8.1, 7.7, 9.24, 5.9, 4.9, 4.7, 4.8, 6.1, 6.3, and 7.1 ug/l in October and November 1994, January and March 1995, February and October 1996, April and October 1997, October 1999, April 2000, April and October 2001, April 2002, October 2005, April and October 2006, May and October 2007, April and October 2008, October 2009, April and October 2010, and April and October 2011, respectively.

Vinyl chloride has exceeded NCGS in 12 sampling events with concentrations of 22, 11.2, 8, 7.2, 6.3, 10.8, 2.6, 5.0, 6.2, 5.2, 5.4, and 8.2 ug/l in April 2001, April 2006, May and October 2007, April and October 2008, April and October 2009, April 2010, and April and October 2011, respectively.

Bis(2-ethylhexyl)phthalate has exceeded NCGS in one sampling event with a concentration of 6.8 ug/l in July 1996.

Benzene, 1,4-dichlorobenzene, cis-1,2-dichloroethene, 1,1-dichloroethane, tetrachloroethylene, trichloroethylene, and vinyl chloride were the detected organics at MW6 during this latest sampling event. With the exception of cis-1,2-dichloroethene and 1,1-dichloroethane, the detected constituents exceeded NCGS. However, MW6 is within the CA area and SA is not applicable at this time.

MW7B: Compliance well MW7B has replaced compliance well MW7. Groundwater data from previous sampling events (October and November 1994, and January and March 1995) from MW7 have been utilized to compare with the data for MW7B sampled since September 1995.

Detected metals in MW7 and/or MW7B include arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, nickel, vanadium, zinc, and mercury.

Arsenic exceeded NCGS in three sampling events with concentrations of 0.033, 0.032, and 0.279 mg/l in September 1995, April 1997, and October 1997, respectively.

Barium exceeded NCGS in two sampling events with concentrations of 0.892 and 0.9 mg/l in October 1994 and March 1999, respectively.

Cadmium exceeded NCGS in two sampling events with concentrations of 0.004 in both September 1995 and April 1997.

Chromium exceeded NCGS in ten sampling events with concentrations of 0.03, 0.04, 0.09, 0.02, 0.021, 0.071, 0.011, 0.09, 0.014, and 0.013 mg/l in October 1994, March and September 1995, April and October 1996, April and October 1997, March 1999, October 2000, and April 2002, respectively.

Cobalt exceeded 13B GPS in 29 sampling events with concentrations of 0.146, 0.013, 0.04, 0.012, 0.018, 0.011, 0.07, 0.02, 0.019, 0.020, 0.014, 0.024, 0.017, 0.025, 0.022, 0.019, 0.015, 0.022, 0.032, 0.031, 0.025, 0.026, 0.031, 0.036, 0.024, 0.029, 0.021, 0.012, and 28 mg/l in October 1994, March and September 1995, April 1996, April and October 1997, March and October 1999, October 2000, April and October 2001, October 2002, April and October 2003, April and October 2004, April and October 2005, April and October 2006, May and October 2007, April and October 2008, April and October 2009, April 2010, and April and October 2011, respectively; and with an estimated result of 9.6 ug/l in October 2010.

Lead exceeded NCGS in 24 sampling events with concentrations of 0.519, 0.044, 0.36, 0.196, 0.087, 0.264, 0.062, 0.070, 0.71, 0.05, 0.10, 0.036, 0.017, 0.020, 0.035, 0.018, 0.027, 0.019, 0.031, 0.019, 0.061, 0.023, 0.017, and 0.034 mg/l in October 1994, March and September 1995, April and October 1996, April and October 1997, April 1998, March and October 1999, April and October 2000, October 2001, April 2002, October 2003, October 2004, and April and October 2005, October 2007, October 2008, October 2009, April and October 2010, and October 2011, respectively.

Mercury exceeded NCGS in six sampling events with concentrations of 0.0027, 0.00142, 0.0011, 0.0015, 0.0046, and 0.0026 mg/l in October 2002, October 2003, October 2004, October 2005, October 2006, and October 2007, respectively.

Thallium exceeded 13B GPS with *estimated* results of 0.5, 0.4, 2.8, 1.1, 0.8, 0.81, and 1.0 ug/l in October 2007, April 2008, October 2008, October 2009, April 2010, and April and October 2011, respectively.

Vanadium exceeded 13B GPS with concentrations of 0.197, 0.06, 0.23, 0.064, 0.054, 0.169, and 0.21 mg/l in October 1994, March and September 1995, April and October 1996, April 1997, and March 1999, respectively, and with *estimated* results of 14.2, 10.7, 1.5, 0.47, and 0.85 ug/l in October 2007, October 2009, October 2010, and April and October 2011, respectively.

Barium, cobalt, and lead were the detected metals at MW7B during this latest sampling event. Although cobalt and lead exceeded GPS, MW7B is within the CA area and SA is not applicable at this time.

Detected organics have included benzene, chlorobenzene, chloroethane, 1,4-dichlorobenzene, cis-1,2-dichloroethene, 1,1-dichloroethene, 1,1-dichloroethane, 1,2-dichloroethane, methylene chloride, toluene, 1,1,1-trichloroethane, tetrachloroethylene, trichloroethylene, trichlorofluoromethane, xylenes, dichlorodifluoromethane, diethylphthalate, and bis(2-ethylhexyl)phthalate. Tetrahydrofuran, which has been included in the analysis since April 2011, has been detected two times.

Benzene has exceeded NCGS in 11 sampling events with concentrations of 1.1, 4.7, 4.1, 4.2, 5.8, 4.6, 9.4, 9.5, 7.3, 6.4, and 6.9 ug/l in March 1999, May 2007, October 2007, April and October 2008, April and October 2009, April and October 2010, and April and October 2011, respectively.

Chloromethane has exceeded NCGS in one sampling event with a concentration of 64 ug/l in April 2000.

1,1-dichloroethane has exceeded NCGS in 34 sampling events with concentrations of 262, 69.7, 52.4, 100, 92, 77, 100, 56, 30, 99.5, 110, 210, 170, 90, 176, 230, 87.1, 220, 141, 137, 113, 147, 22.5, 176, 174, 153, 129, 15.1, 114, 110, 136, 140, 120, and 142 ug/l in October and November 1994, March and September 1995, February, April and October 1996, April and October 1997, April 1998, March and October 1999, April and October 2000, October 2001, April and October 2002, April and October 2003, April and October 2004, April and October 2005, April and October 2006, May and October 2007, October 2008 and April and October 2009, April and October 2010, and April and October 2011, respectively.

1,2-dichloroethane has exceeded NCGS in two sampling events with a concentration of 8.7 ug/l in April 2003 and *estimated* concentrations of 0.4 and 0.5 ug/L in October 2008 and April 2011, respectively.

1,1-dichloroethene has exceeded NCGS in one sampling event with a concentration of 8.1 ug/l in April 2003.

Methylene chloride has exceeded NCGS in 22 sampling events with concentrations of 60, 75, 138, 154, 26.4, 174, 70.3, 93.3, 101, 75.1, 59.6, 79.9, 74.1, 74.5, 45.5, 69, 80.9, 45.3, 79.9, 60.8, 60.1, and 70.2 ug/l in October 2000, April and October 2001, April and October 2002, April and October 2003, April and October 2004, April and October 2005, April and October 2006, May and October 2007, October 2008, April and October 2009, April and October 2010, and April and October 2011, respectively.

Tetrachloroethylene exceeded NCGS in ten sampling events with concentrations of 9.0, 3.7, 3.2, 3.7, 3.3, 7.3, 4.9, 4.7, 3.5, and 5.7 ug/l in October 2005, October 2007, April and October 2008, April and October 2009, April and October 2010, and April and October 2011, respectively.

Trichloroethylene exceeded NCGS in 24 sampling events, with concentrations of 9.9, 10.7, 3.6, 7.8, 6.0, 5.3, 7.3, 8.8, 6.8, 7.6, 7.7, 7.5, 10.5, 9.9, 8.8, 9.2, 9.1, 8.8, 7.8, 10.9, 10.2, 9.8, 7.7, and 10.5 ug/l in October and November 1994, March and October 1999, April 2000, April and October 2001, April 2002, October 2003, April and October 2004, April 2005, April and October 2006, May and October 2007, April and October 2008, April and October 2009, April and October 2010, and April and October 2011, respectively.

Vinyl chloride has exceeded NCGS in ten sampling events with concentrations of 5, 5, 3.9, 8.2, 4.3, 6.4, 6.4, 5.8, 4.0, and 7.2 ug/l in May and October 2007, April and October 2008, April and October 2009, April and October 2010, and April and October 2011, respectively.

Bis(2-ethylhexyl)phthalate exceeded NCGS in one sampling event with a concentration of 24 ug/l in September 1995.

1,1,2,2-tetrachloroethane exceeded 13B GPS with an *estimated* result of 1.0 ug/l in October 2008.

During this latest sampling event, benzene, chlorobenzene, 1,4-dichlorobenzene, cis-1,2-dichloroethene, 1,1-dichloroethane, methylene chloride, tetrachloroethylene, trichloroethylene, and vinyl chloride were detected at MW7B. With the exception of chlorobenzene, 1,4-dichlorobenzene, and cis-1,2-dichloroethene, the detected constituents exceeded NCGS. However, MW7B is within the CA area and SA is not applicable at this time.

MW8: Compliance well MW8 has shown above detection limit inorganic concentrations for barium, beryllium, cadmium, chromium, copper, lead, vanadium, zinc, cyanide, and mercury.

Arsenic exceeded NCGS in one sampling event with a concentration of 0.015 mg/l in April 1997.

Cadmium exceeded NCGS in two sampling events with a concentration of 0.002 mg/l in both November 1994 and April 1997.

Chromium exceeded NCGS in three sampling events with concentrations of 0.013, 0.111, and 0.022 mg/l in November 1994, April 1997, and October 2001.

Cobalt exceeded GPS in three sampling events with *estimated* results of 1.3, 1.7, and 1.4 ug/l in October 2010 and April and October 2011, respectively.

Lead exceeded NCGS in one sampling event with a concentration of 0.073 mg/l in April 1997.

Vanadium exceeded GPS with concentrations of 0.045, 0.41, and 0.063 mg/l in November 1994, April 1997, and October 2001, and *estimated* results of 2.1, 0.94, and 0.96 ug/l in October 2010 and April and October 2011, respectively.

Cyanide exceeded NCGS in one sampling event with a concentration of 0.127 mg/l in October 1996. Mercury exceeded NCGS in one sampling event with a concentration of 0.002 mg/l in October 1998.

Mercury was the only detected metal at MW8 during this latest sampling event. The level was less than NCGS.

Detected organics at MW8 have included benzene, cis-1,2-dichloroethene, carbon disulfide, chloroethane, chloromethane, 1,4-dichlorobenzene, 1,1-dichloroethane, methylene chloride, dichlorodifluoromethane, vinyl chloride, and xylenes. Tetrahydrofuran, which has been included in the analysis since April 2011, has been detected once.

Benzene exceeded NCGS in 11 sampling events, with concentrations of 2.1, 1.6, 2.6, 2.5, 2.9, 2.6, 25.2, 5.6, 5.7, 4.1, and 4.9 ug/l in October 1997, March 1999, October 2007, April and October 2008, April and October 2009, April and October 2010, and April and October 2011, respectively.

Chloromethane exceeded NCGS in three sampling events, with concentrations of 6.1, 88, and 25 ug/l in October 1999, April 2000, and October 2001, respectively.

1,1-dichloroethane exceeded NCGS in 31 sampling events with concentrations of 6.4, 11, 7.8, 45, 47, 10.2, 39, 37, 59, 92, 44, 135, 80, 76.8, 71.5, 59.2, 42.7, 31, 38.9, 59, 58.6, 63, 49.1, 54.3, 61.8, 32, 38, 38, 44.6, 35.2, and 37.6 ug/l in September 1995, February and April 1996, April and October 1997, April and October 1998, March and October 1999, April and October 2000, April 2001, April and October 2002, April and October 2003, April and October 2004, April and October 2005, April and October 2006, May and October 2007, October 2008, April and October 2009, April and October 2010, and April and October 2011, respectively.

1,2-dichloroethane exceeded NCGS in one sampling event, with an *estimated* concentration of 0.8 ug/l in October 2009.

1,1-dichloroethene exceeded NCGS in one sampling event, with a concentration of 81 ug/l in October 2001.

Methylene chloride exceeded NCGS in 28 sampling events, with concentrations of 49, 31, 5.2, 25, 30, 74, 140, 92, 90, 80.5, 71.2, 69, 44.5, 39.9, 40.6, 63.3, 64, 67.2, 48.4, 35.9, 31,

48, 32.5, 32.3, 31.4, 45, 35.1, and 39.3 ug/l in April and October 1997, April and October 1998, March 1999, October 2000, April and October 2001, April and October 2002, April and October 2003, April and October 2004, April and October 2005, April and October 2006, May and October 2007, April and October 2008, April and October 2009, April and October 2010, and April and October 2011, respectively.

Tetrachloroethylene exceeded NCGS in 11 sampling events, with concentrations of 5.2, 5, 6.5, 5.5, 4.7, 5.7, 5.2, 5, 4.2, 4.3, and 4.6 ug/l in October 2006, May and October 2007, April and October 2008, April and October 2009, April and October 2010, and April and October 2011, respectively.

Trichloroethylene exceeded NCGS in 11 sampling events, with concentrations of 6.8, 5.3, 4, 4.4, 4.8, 4.8, 41.1, 4.1, 4.3, 4.6, and 4.7 ug/l in April and October 2001, May and October 2007, April and October 2008, April and October 2009, April and October 2010, and October 2011, respectively.

Vinyl chloride exceeded NCGS with *estimated* results of 0.9 and 0.8 ug/l in October 2007 and October 2009, and results of 1.0, 1.5, 1.3, 1.6, 1.5, 1.4, and 2.6 ug/L in April and October 2008, April 2009, April and October 2010, and April and October 2011, respectively.

During this latest sampling event, benzene, 1,4-dichlorobenzene, cis-1,2-dichloroethene, 1,1-dichloroethane, methylene chloride, tetrachloroethylene, trichloroethylene, and vinyl chloride were detected at MW8. With the exception of 1,4-dichlorobenzene and cis-1,2-dichloroethene, the detected constituents exceeded NCGS. However, MW8 is within the CA area and SA is not applicable at this time.

MW9: Compliance well MW9 was installed in March 2001 and was sampled for the first time in April 2001. The data are now included in the statistical analysis.

Detected metals in MW9 include barium, chromium, copper, lead, mercury, and vanadium. Chromium exceeded NCGS in four sampling events with concentrations of 0.038, 0.015, 0.082, and 0.017 mg/l in October 2001, April and October 2002, and April 2010, respectively. Mercury exceeded NCGS in two sampling events with concentrations of 0.005 and 0.0015 mg/l in October 2007 and October 2008. Vanadium exceeded 13B GPS with concentrations of 0.078, 0.189, and 0.039 mg/l in October 2001, October 2002, and April 2010, respectively, and with *estimated results* of 6.1 and 3.7 ug/l in April and October 2009.

Detected organics at MW9 have included benzene, chlorobenzene, chloroethane, chloromethane, 1,2-dibromoethane, 1,4-dichlorobenzene, cis-1,2-dichloroethene, 1,1-dichloroethane, 1,2-dichloroethane, methylene chloride, tetrachloroethylene, trichloroethylene, vinyl chloride, and xylenes.

Benzene exceeded NCGS in 15 sampling events, with concentrations of 8.6, 11, 7.8, 8.2, 8.1, 6.4, 5.6, 5.2, 5, 5.4, 11.5, 8, 8.1, 7.2, and 8.7 ug/l in April and October 2001, April and October 2002, April and October 2003, April and October 2006, May and October 2007, April and October 2008, April and October 2009, and April 2010, respectively.

Chloromethane exceeded NCGS in one sampling event, with a concentration of 189 ug/l in April 2001. 1,2-dibromoethane exceeded NCGS in one sampling event, with a concentration of 14 ug/l in October 2001.

1,4-dichlorobenzene exceeded NCGS in one sampling event, with a concentration of 6.6 ug/l in April 2008.

1,1-dichloroethane exceeded NCGS in 16 sampling events, with concentrations of 126, 219, 170, 202, 135, 122, 75.2, 81.9, 110, 103, 87, 74.7, 58.1, 68.1, 43.3, and 34.3 ug/l in October 2001, April and October 2002, April and October 2003, April and October 2004, April and October 2005, April and October 2006, May and October 2007, October 2008, and April and October 2009, respectively.

1,2-dichloroethane exceeded NCGS in two sampling event, with concentrations of 11.8 and 0.8 (estimated) ug/l in April 2003 and April 2008, respectively.

Methylene chloride exceeded NCGS in 17 sampling events, with concentrations of 195, 231, 272, 197, 166, 127, 67.9, 56.7, 75.7, 122, 96.4, 64.2, 49.6, 64.6, 53.2, 42.2, and 37.7 ug/l in October 2001, April and October 2002, April and October 2003, April and October 2004, April and October 2005, April and October 2006, May and October 2007, October 2008, April and October 2009, and April 2010, respectively.

Tetrachloroethylene exceeded NCGS in nine sampling events, with concentrations of 5.3, 5.3, 5.1, 2.9, 4.4, 2.4, 1.4, 1.0, and 1.2 ug/l in October 2001, October 2002, April 2003, October 2007, April and October 2008, April and October 2009, and April 2010, respectively.

Trichloroethylene exceeded NCGS in 14 sampling events, with concentrations of 11, 15, 9.8, 10, 9.5, 8.2, 5.8, 7.0, 6.5, 6.2, 5.0, 4.7, 3.9, 5.9, and 4.2 ug/l in April and October 2001, April and October 2002, October 2003, April and October 2004, April and October 2005, April and October 2006, May and October 2007, and April and October 2008, respectively.

Vinyl chloride exceeded NCGS in seven sampling events, with concentrations of 9.1, 5.9, 6.5, 8.7, 6.4, 6.3, and 7.9 ug/l in May and October 2007, April and October 2008, April and October 2009, and April 2010, respectively.

MW9 was not sampled as it did not produce sufficient groundwater for purging and sample collection during the October 2011 sampling event.

MW10: Compliance well MW10 was installed in March 2001 and was sampled for the first time in April 2001. The data are now included in the statistical analysis.

Detected metals in MW10 include chromium, copper, lead, vanadium and zinc. Arsenic exceeded NCGS in one sampling event with a concentration of 0.016 in April 2009. Chromium exceeded NCGS in four sampling events with concentrations of 0.014, 0.013, 0.118, and 0.012 mg/l in April 2001, April and October 2002, and October 2005. Vanadium exceeded 13B GPS with concentrations of 0.013, 0.05, 0.006, 0.04, and 0.246 mg/l in October and November 1994, January and March 1995, and October 2002, respectively,

and with *estimated* results of 12.2, 3.7, 5.2, 5.2, 5.8, and 4.8 ug/l in October 2007, April 2008, and April and October 2009, October 2010, and April 2011, respectively. No inorganics were detected at MW10 during this latest sampling event.

Detected organics at MW10 have included acetone, benzene, chlorobenzene, chloroethane, 1,4-dichlorobenzene, cis-1,2-dichloroethene, 1,2-dibromoethane, 1,1-dichloroethane, methylene chloride, tetrachloroethylene, toluene, trichloroethylene, vinyl chloride, and xylenes.

Acetone exceeded NCGS in one sampling event, with a concentration of 2,340 ug/l in April 2009 (apparent anomaly).

Benzene exceeded NCGS in 10 sampling events, with concentrations of 6.9, 7.3, 6.2, 4.6, 2.0, 4.5, 3.9, 7.0, 5.0, 6.7, and 1.2 ug/l in April and October 2001, April 2002, May and October 2007, April and October 2008, April and October 2009, and April and October 2010, respectively.

1,1-dichloroethane exceeded NCGS in 16 sampling events, with concentrations of 266, 109, 59.3, 42.6, 69.1, 606, 53.3, 34.9, 25.2, 19.1, 9.4, 10.9, 9.2, 7.5, 7.7, and 6.2 ug/l, in October 2001, April and October 2002, April and October 2003, April and October 2004, April and October 2005, April and October 2006, May and October 2007, April and October 2008, and April 2010, respectively.

Methylene chloride exceeded NCGS in 14 sampling events, with concentrations of 120, 310, 132, 59.3, 19.7, 48.7, 48, 67.7, 51.6, 27.1, 14.4, 10, 7.7, and 15.4 ug/l in April and October 2001, April and October 2002, April and October 2003, April and October 2004, April 2005, April 2006, April and October 2009, and April 2010, respectively.

Tetrachloroethylene exceeded NCGS in seven sampling events, with concentrations of 12, 11, 13, 6.8, 7.1, 7.3, and 1.1 ug/l in April and October 2001, April and October 2002, April and October 2003, and April 2010, respectively.

Trichloroethylene exceeded NCGS in four sampling events, with a concentrations of 11, 11, 9.1, and 5.7 ug/l in April and October 2001, April 2002, and October 2003, respectively.

Vinyl chloride exceeded NCGS in eight sampling events, with concentrations of 10, 1.4, 2, 3.3, 3.9, 2.0, 3.9, and 1.0 ug/l in April 2001, October 2007, April and October 2008, April and October 2009, and April and October 2010, respectively.

MW10 was not sampled as it did not produce sufficient groundwater for purging and sample collection during the October 2011 sampling event.

MW11: Compliance well MW11 was installed in 2006 and was sampled for the first time in May 2007. Detected metals in MW11 include cadmium and zinc. Antimony exceeded 13B GPS with an *estimated* concentration of 2.7 ug/l in April 2011. Vanadium exceeded 13B GPS with *estimated* concentrations of 6.2, 6.1, 4.5, 3.5, 1.4, and 6.2 ug/l in October 2008, April and October 2009, October 2010, and April and October 2011, respectively. No organics have

been detected in MW11. Only cadmium was detected at MW11 during this latest sampling event. The result did not exceed NCGS or GPS and SA was not performed.

MW12: Compliance well MW12 was installed in 2006 and was sampled for the first time in May 2007. Detected metals in MW12 include beryllium and zinc. Cobalt exceeded 13B GPS with an *estimated* concentration of 1.3 ug/l in October 2011. Vanadium exceeded 13B GPS with *estimated* concentrations of 6.4, 8.0, 4.4, 1.6, 1.1, and 14.5 ug/l in October 2007, April and October 2009, October 2010, and October 2011, respectively. No other inorganics have exceeded NCGS or 13B GPS. No organics have been detected in MW12. Beryllium and zinc were detected at MW12 during this latest sampling event. The results did not exceed NCGS or GPS and SA was not performed.

MW13: Compliance well MW13 was installed in 2006 and was sampled for the first time in May 2007. Detected metals in MW13 include zinc. Cobalt exceeded 13B GPS with *estimated* results of 5.9 and 2.1 ug/l in April and October 2011. Vanadium exceeded 13B GPS with *estimated* results of 1.6, 0.81, and 1.1 ug/l in October 2010 and April and October 2011, respectively. No organics have been detected in MW13. No constituents were detected during this sampling event.

MW14: Compliance well MW14 was installed in 2006 and was sampled for the first time in May 2007. Detected metals in MW14 include beryllium and zinc. Beryllium exceeded NCGS with a concentration of 0.005 mg/l in October 2011. Cobalt exceeded 13B GPS with an *estimated* concentration of 1.3 ug/l in October 2011. Vanadium exceeded 13B GPS with *estimated* concentrations of 5.9, 4.6, 2.9, and 18.3 ug/l in April 2009, October 2010, and April and October 2011, respectively. Chloromethane is the only organic to have been detected in MW14.

Beryllium and zinc were detected at MW35 during the latest sampling event. Beryllium exceeded NCGS, but the concentration was not SSI OBL using the Test of Proportions. The zinc result did not exceed NCGS and SA was not performed.

MW15: Compliance well MW15 was installed in 2006 and was sampled for the first time in May 2007. The data are now included in the statistical analysis. Detected metals in MW15 include barium and beryllium. Cobalt exceeded GPS with an *estimated* result of 1.5 ug/l in October 2010. Vanadium exceeded GPS with *estimated* results of 2.1 and 0.58 ug/l in October 2010 and April 2011, respectively. Acetone and toluene are the only organics detected in MW15. MW15 was not sampled as it did not produce sufficient groundwater for purging and sample collection during the October 2011 sampling event.

MW23B: MW23B is a Set 2 well. It does not follow the Set 1 analysis schedule since it is too remote to be a monitoring point for the active portion of the landfill. It is analyzed for Appendix I organics plus the eight RCRA metals as a part of Set 2. However, it is statistically compared with Set 1 because it appears to be located downgradient of the active landfill.

Compliance well MW23B has shown above the detection limit inorganic concentrations for barium, beryllium, cadmium, chromium, copper, lead, selenium, silver, zinc, and mercury. Of these, arsenic exceeded NCGS in two sampling events with concentrations of 0.064 and 0.015 in October 1997 and October 1999, respectively. Chromium exceeded NCGS in five

sampling events with concentrations of 0.025, 0.012, 0.0105, 0.025, and 0.104 in November 1994, March 1995, February 1996, March 1999, and October 1999, respectively. Lead exceeded NCGS in March and September 1995, February 1996, March and October 1999 with concentrations of 0.018, 0.027, 0.0157, 0.049, and 0.089 mg/l, respectively. Silver exceeded NCGS in one sampling event with a concentration of 0.105 in January 1995. Vanadium exceeded GPS with concentrations of 0.013, 0.05, 0.006, and 0.04 mg/l in October and November 1994 and January and March 1995, respectively. (Vanadium is no longer sampled at MW23B.) Mercury also exceeded NCGS in one sampling event with a concentration of 0.0017 mg/l in March 1999. No organics have been detected in MW23B. No inorganics were detected during this latest sampling event.

MW53: Compliance well MW53, associated with corrective action was installed in June 2010 and was sampled for the first time in October 2010.

Copper has been the only detected metal in MW53. Cobalt exceeded GPS with *estimated* results of 3.5 and 1.7 ug/l in October 2010 and October 2011. Vanadium exceeded GPS with *estimated* results of 5.3, 1.4, and 1.2 ug/l in October 2010 and April and October 2011, respectively. Inorganic constituents were not detected at MW53 during this latest sampling event.

Detected organics at MW53 have included benzene, 1,4-dichlorobenzene, 1,1-dichloroethane, methylene chloride, tetrachloroethylene, trichloroethylene, and vinyl chloride.

Benzene exceeded NCGS in two events with concentrations of 5.1 and 3.4 ug/l in April and October 2011.

1,1-dichloroethane exceeded NCGS in three events with concentrations of 15.6, 14.9, and 9.8 ug/l in October 2010 and April and October 2011, respectively.

Methylene chloride exceeded NCGS in two events with concentrations of 14.2 and 28.2 ug/l in October 2010 and April 2011, respectively.

Tetrachloroethylene exceeded NCGS in two events with concentrations of 1.2 and 1.1 ug/l in October 2010 and April 2011, respectively, and with an estimated result of 0.9 ug/l in October 2011.

Vinyl chloride exceeded NCGS in three events with concentrations of 1.3, 2.1, and 2.1 ug/l in October 2010 and April and October 2011.

During this latest sampling event, benzene, 1,4-dichlorobenzene, cis-1,2-dichloroethene, 1,1-dichloroethane, methylene chloride, tetrachloroethylene, trichloroethylene, and vinyl chloride were detected at MW53. With the exception of 1,4-dichlorobenzene and cis-1,2-dichloroethene, the detected constituents exceeded NCGS. However, MW53 is associated with the CA area and SA is not applicable at this time.

MW56: Compliance well MW56, associated with corrective action was installed in June 2010 and was sampled for the first time in October 2010.

Detected inorganics at MW56 include lead and zinc. Cobalt exceeded GPS with *estimated* results of 2.1, 2.5, and 1.3 ug/l in October 2010 and April and October 2011, respectively. Vanadium exceeded GPS with *estimated* results of 2.3, 1.7, and 13.6 ug/l in October 2010 and April and October 2011, respectively. No organics have been detected at MW56. Lead and zinc were detected at MW56 during this latest sampling event. The levels were below NCGS.

MW57: Compliance well MW57, associated with corrective action was installed in June 2010 and was sampled for the first time in October 2010.

Detected inorganics in MW57 include barium, beryllium, chromium, lead, vanadium, and zinc. Chromium exceeded NCGS in one event with a concentration of 0.011 mg/l in October 2011. Cobalt exceeded GPS with *estimated* results of 3.3, 3.2, and 2.8 ug/l in October 2010 and April and October 2011, respectively. Lead exceeded NCGS in one event with a concentration of 0.016 mg/l in October 2011. Vanadium exceeded GPS with a concentration of 34 ug/l in October 2011, and with *estimated* results of 3.7 and 1.8 ug/l in October 2010 and April 2011, respectively.

Detected inorganics consisted of barium, beryllium, chromium, lead, vanadium, and zinc at MW57 during this latest sampling event. Of these detections, chromium, lead, and vanadium exceeded NCGS or GPS. However, MW57 is associated with the CA area and SA is not applicable at this time.

Detected organics at MW57 have included benzene, 1,4-dichlorobenzene, cis-1,2-dichloroethene, methylene chloride, trichloroethylene, and vinyl chloride.

Benzene exceeded NCGS in one event with a concentration of 2.0 ug/l in October 2010.

Vinyl chloride exceeded NCGS in two events with concentrations of 1.2 and 1.2 ug/l in October 2010 and April 2011, respectively.

During this latest sampling event, organic detections were limited to methylene chloride at MW57, at a concentration less than the NCGS.

MW58: Compliance well MW58, associated with corrective action was installed in June 2010 and was sampled for the first time in October 2010.

Inorganics detections have been limited to chromium and lead at MW58. Chromium exceeded NCGS in one event with a concentration of 0.016 mg/l in October 2011. Cobalt exceeded GPS with *estimated* results of 1.1, 1.2, and 1.5 ug/l in October 2010 and April and October 2011, respectively. Vanadium exceeded GPS with *estimated* results of 4.5, 1.7, and 18.4 ug/l in October 2010 and April and October 2011, respectively. No organics have been detected at MW58.

Chromium and lead were detected at MW58 during the latest sampling event. The chromium concentration exceeded NCGS. However, MW58 is associated with the CA area and SA is not applicable at this time.

MW59: Compliance well MW59, associated with corrective action was installed in June 2010 and was sampled for the first time in October 2010.

For inorganics, barium, beryllium, chromium, copper, lead, vanadium, and zinc have been detected in MW59. Chromium exceeded NCGS in one event with a concentration of 0.012 mg/l in October 2011. Cobalt exceeded GPS with *estimated* results of 5.2, 2.9, and 2.9 ug/l in October 2010 and April and October 2011, respectively. Lead exceeded NCGS in one event with a concentration of 0.029 mg/l in October 2011. Vanadium exceeded GPS with a concentration of 34 ug/l in October 2011, and with *estimated* results of 11.4 and 7.3 ug/l in October 2010 and April 2011, respectively.

Beryllium, chromium, copper, lead, vanadium, and zinc were detected at MW59 during the latest sampling event. Chromium, lead and vanadium concentrations exceeded NCGS or GPS. However, MW59 is associated with the CA area and SA is not applicable at this time.

Organic detections have been limited to benzene and vinyl chloride at MW59. Vinyl chloride exceeded NCGS with a concentration of 1.0 ug/l in October 2011, and with an *estimated* result of 0.7 ug/l in April 2011. Benzene and vinyl chloride were the detected organic constituents at MW59 during the latest sampling event. Vinyl chloride exceeded NCGS. However, MW59 is associated with the CA area and SA is not applicable at this time.

DATA SET 2

In October 2011, Set 2 monitoring wells were sampled and analyzed for Appendix I organics and eight RCRA metals only as they monitor the older, closed-out portion of the landfill. Prior to September 1995, there are data for all Appendix I constituents. These data are reported, however analyses are performed for only the eight RCRA metals.

Upgradient Well (Background Well):

MW16: MW16 is a background well for MW32, MW33, MW34, and MW35 in this analysis. The detected inorganics in MW16 include barium, cadmium, chromium, cobalt, copper, lead, mercury, vanadium, and zinc. Of these, cadmium exceeded NCGS in six sampling events with concentrations of 0.0018, 0.006, 0.007, 0.002, 0.0075, and 0.0049 mg/l in October 1994, January, March, and September 1995, October 1996, and April 1997, respectively. Chromium exceeded NCGS in three sampling events with concentrations of 0.019, 0.062, and 0.019 ug/l in April 1997, March 1999, and October 1999, respectively. Cobalt exceeded the current GPS with a concentration of 0.011 mg/l in October 1996. Lead exceeded NCGS in two sampling events with a concentration of 0.02 and 0.039 ug/l in April 1997 and March 1999, respectively. Although no longer included in the sampling, vanadium exceeded the current GPS with concentrations of 0.005 and 0.012 mg/l in October and November 1994. The only detected organic in MW16 was methylene chloride in January 1995, which exceeded NCGS with a concentration of 29.4 ug/l. No constituents were detected at MW16 during the latest sampling event.

The following summarizes the history of detected concentrations for each metal constituent in MW16:

- barium:* Barium was detected in ten sampling events for MW16 with concentrations of 0.112, 0.194, 0.114, 0.147, 0.014, 0.099, 0.1, 0.281, 0.162, and 0.06 mg/l in October and November 1994, January and March 1995, October 1997, April and October 1998, March and October 1999, and April 2000, respectively.
- cadmium:* Cadmium was detected in eight sampling events for MW16 with concentrations of 0.0018, 0.001, 0.006, 0.007, 0.002, 0.0075, 0.0049, and 0.001 mg/l in October and November 1994, January, March, and September 1995, October 1996, April 1997, and March 1999, respectively.
- chromium:* Chromium was detected in eight sampling events for MW16 with concentrations of 0.004, 0.007, 0.005, 0.01, 0.019, 0.006, 0.008, 0.062 and 0.019 mg/l in October and November 1994, March, and September 1995, April 1997, April and October 1998, and March and October 1999, respectively.
- copper:* Copper was detected in four sampling events for MW16 with concentrations of 0.008, 0.009, 0.018, and 0.014 mg/l in October and November 1994 and January and March 1995, respectively.
- lead:* Lead was detected in ten sampling events for MW16 with concentrations of 0.002, 0.003, 0.004, 0.013, 0.012, 0.020, 0.002, 0.005, 0.039, 0.011, and 0.002 mg/l in October and November 1994, March and September 1995, October 1996, April and October 1997, October 1998, March and October 1999, and April 2000, respectively.
- mercury:* Mercury was detected in only one sampling event for MW16 with a concentration of 0.0002 mg/l in October 1998.
- vanadium:* Vanadium was detected in two sampling events for MW16 with concentrations of 0.005 and 0.012 mg/l in October and November 1994.
- zinc:* Zinc was detected in five sampling events for MW16 with concentrations of 0.012, 0.014, 0.015, 0.027, and 0.07 mg/l in October and November 1994, January and March 1995, and October 1996, respectively.

Downgradient Wells (Compliance Wells):

MW32: Compliance well MW32 has had detections for antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, nickel, selenium, vanadium, and zinc. Of these, arsenic exceeded NCGS in one sampling event with a concentration of 0.015 mg/l in November 1994. Cadmium exceeded NCGS in two sampling events with concentrations of 0.004 and 0.025 mg/l in November 1994 and October 1998. Chromium exceeded NCGS in eight sampling events with concentrations of 0.133, 0.015, 0.022, 0.038, 0.041, 0.094, 0.012, and 0.014 mg/l in November 1994, January and March 1995, March and October 1999, April

2003, October 2003, and April 2011, respectively. Cobalt exceeded GPS with concentrations of 0.039, 0.013, and 0.009 mg/l in November 1994 and January and March 1995, respectively. Lead exceeded NCGS in ten sampling events with concentrations of 0.09, 0.02, 0.064, 0.033, 0.063, 0.029, 0.021, 0.024, 0.023, and 0.052 mg/l in November 1994, March 1995, March and October 1999, April 2003, April 2005, April 2006, April 2008, October 2009, and April 2011, respectively. Vanadium exceeded GPS with concentrations of 0.005, 0.41, 0.045, and 0.09 mg/l in October and November 1994 and January and March 1995, respectively. The only detected organic constituent for MW32 was MEK (2-butanone) with a concentration of 471 ug/l in January 1995. No constituents were detected at MW32 during the latest sampling event.

MW33: Compliance well MW33 has had detections for barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, vanadium, zinc. Of these, cadmium exceeded NCGS in three sampling events with concentrations of 0.0021, 0.003, and 0.005 mg/l in October and November 1994 and January 1995, respectively. Chromium exceeded NCGS in three events with concentrations of 0.012, 0.014, and 0.012 mg/l in November 1994, January 1995, and October 1998, respectively. Cobalt exceeded GPS with concentrations of 0.006 and 0.006 mg/l in November 1994 and January 1995, respectively. Lead exceeded NCGS in two sampling events with concentrations of 0.014 and 0.016 mg/l in January 1995 and October 1998, respectively. Vanadium exceeded GPS with concentrations of 0.008, 0.02, and 0.02 mg/l in October and November 1994 and January 1995, respectively. The only detected organic was cis-1,2-dichloroethene, detected in October 1998 with a concentration of 1.8 ug/l. No constituents were detected in MW33 during the latest sampling event.

MW34: This compliance well, installed in June 1996, was sampled for Appendix I organics and the eight RCRA metals in April 1998. Inorganics barium, chromium, lead, and mercury have been detected in MW34. No organics have been detected at this monitoring well. Chromium exceeded NCGS in three events with concentrations of 0.017, 0.031, and 0.012 in October 1998 and March and October 1999, respectively. Lead exceeded NCGS in four events with concentrations of 0.02, 0.025, 0.02, and 0.06 mg/l in October 1998, March and October 1999, and April 2010, respectively. No constituents were detected in MW34 during the latest sampling event.

MW35: This compliance well, installed in June 1996, was analyzed for Appendix I organics and the eight RCRA metals in April 1998. Inorganics arsenic, barium, cadmium, chromium, lead, mercury and selenium have been detected at MW35. Of these arsenic exceeded NCGS in three sampling events with concentrations of 0.0681, 0.021, and 0.016 mg/l in April 1997, October 1997, and October 1998, respectively. Barium has exceeded NCGS in three sampling events with concentrations of 2.06, 0.877, and 0.848 mg/l in April 1997, October 1997, and March 1999, respectively. Cadmium has exceeded NCGS in two sampling events with concentrations of 0.0119 and 0.208 mg/l in April and October 1997. Chromium has exceeded NCGS in four sampling events with concentrations of 0.0119, 0.208, 0.148, and 0.035 mg/l in April and October 1997, March 1999, and October 1999, respectively. Lead has exceeded NCGS in five sampling events with concentrations of 0.355, 0.105, 0.055, 0.110 and 0.043 mg/l in April and October 1997, October 1998, and March and October 1999, respectively. Mercury exceeded NCGS in one sampling event with a concentration of 2.06 mg/l in 0.002 mg/l in April 1997. No organics have been detected in MW35.

Barium was the only constituent detected at MW35 during the latest sampling event. The result did not exceed NCGS and SA was not performed.

SET 3: SURFACE WATER MONITORING POINTS

Set 3 surface water monitoring points were sampled and analyzed for Appendix I parameters only.

Upgradient Surface Water Monitoring Point (Background):

SWPT1: SWPT1 is an upgradient surface water monitoring point for SWPT2 and SWPT3. SWPT1 has had detected metal concentrations for arsenic, barium, cadmium, chromium, copper, and zinc. Arsenic exceeded NCGS in four sampling events with concentrations of 0.013, 0.047, 0.021, and 0.011 mg/l in September 1995, October 2008, and April and October 2009, respectively. Chromium exceeded NCGS in one sampling event with a concentration of 0.011 in April 1999. Cobalt exceeded current GPS with concentrations of 0.01, 0.031, 0.037 mg/l in October 1999, October 2008, April 2009, respectively. Lead exceeded NCGS with a concentration of 0.029 mg/l in April 2009. Vanadium exceeded 13B GPS with concentrations of 40 and 39 ug/l in October 2008 and April 2009, respectively, and with *estimated* concentrations of 18.8, 2.7, and 1.9 ug/l in October 2009, October 2010, and April 2011, respectively. The only organics detected at SWPT1 were toluene in October 1999 and chloromethane in October 2008. SWPT1 was not sampled during this event due to dry conditions.

The following summarizes the detection history at SWPT1:

- arsenic:* Arsenic was detected in five sampling events for SWPT1 with concentrations of 0.007, 0.013, 0.047, 0.021, and 0.011 mg/l in October 1994, September 1995, October 2008, and April and October 2009, respectively.
- barium:* Barium was detected in six sampling events for SWPT1 with concentrations of 0.045, 0.033, 0.03, 0.029, 0.183, and 0.222 mg/l in October and November 1994, January and March 1995, October 2008, and April 2009, respectively.
- cadmium:* Cadmium was detected in three sampling events for SWPT1 with concentrations of 0.001 mg/l in September 1995, October 2003, and October 2010.
- chromium:* Chromium was detected in two sampling event for SWPT1 with concentrations of 0.002 and 0.011 mg/l in October 1994 and April 2009.
- cobalt:* Cobalt was detected in three sampling events for SWPT1 with a concentration of 0.010, 0.031, and 0.037 mg/l in October 1999, October 2008, and April 2009, respectively.

- copper:* Copper was detected in three sampling events for SWPT1 with concentrations of 0.006, 0.006, and 0.015 mg/l in October 1994, March 1995, and April 2009, respectively.
- lead:* Lead was detected in two sampling events for SWPT1 with concentrations of 0.01, and 0.029 mg/l in October 2008 and April 2009.
- vanadium:* Vanadium was detected in two sampling events for SWPT1 with concentrations of 0.04 and 0.039 mg/l in October 2008 and April 2009, respectively.
- zinc:* Zinc was detected in 11 sampling events for SWPT1 with concentrations of 0.011, 0.016, 0.021, 0.013, 0.22, 0.04, 0.011, 0.022, 0.033, 0.073, and 0.016 mg/l in October and November 1994, January and March 1995, October 1997, October 1998, May 2007, April and October 2008, April 2009, and October 2010, respectively.
- chloromethane:* Chloromethane was detected in one sampling event for SWPT1 with a concentration of 1.3 ug/l in October 2008.
- toluene:* Toluene was detected in one sampling event for SWPT1 with a concentration of 1.3 ug/l in October 1999.

Downgradient Surface Water Monitoring Points (Compliance):

SWPT2: SWPT2 is a compliance surface water monitoring point with previously detected metal concentrations for arsenic, barium, cadmium, chromium, copper, lead and zinc. Arsenic exceeded NCGS in one sampling event with a concentration of 0.012 in October 2008. Cobalt exceeded 13B GPS with a concentration of 0.01 mg/l in October 1999 and *estimated* concentrations of 5.2 and 1.3 ug/l in October 2010 and April 2011, respectively. Vanadium exceeded 13B GPS with *estimated* concentrations of 23.1, 7.1, 7.4, 4.0, and 2.4 ug/l in October 2008, October 2009, April and October 2010, and April 2011, respectively. Detected organics include toluene. SWPT2 was not sampled during this event due to dry conditions.

SWPT3: SWPT3 is a compliance surface water monitoring point with previously detected metal concentrations for arsenic, barium, cadmium, chromium, cobalt, copper, lead and zinc. Of these, arsenic exceeded NCGS in two sampling events with concentrations of 0.023 and 0.011 mg/l in September 1995 and October 1998, respectively. Cadmium exceeded NCGS in two sampling events with concentrations of 0.0045 and 0.006 mg/l in October 1994 and September 1995. Chromium exceeded NCGS in one sampling event with a concentration of 0.02 mg/l in April 1998. Cobalt exceeded current GPS with concentrations of 0.006 and 0.002 mg/l in October 1994 and October 2002, respectively, and an estimated result of 5.0 ug/l in October 2011. Lead exceeded NCGS in one sampling event with a concentration of 0.02 mg/l in October 1998. Vanadium exceeded 13B GPS with *estimated* values of 3.9, 13.7, 4.7, 1.7, 6.7, and 0.43 ug/l in April 2008, October 2008, April and October 2010, and April and October 2011, respectively. The previously detected organics for SWPT3 include benzene, cis-1,2-dichloroethene, ethylbenzene, toluene, vinyl chloride, and xylenes. Of these, benzene and vinyl chloride exceeded groundwater standards for the September 1995 sampling event with concentrations of 9.1 and 15 ug/l, respectively.

Barium and zinc were detected during the latest sampling event at SWPT3. The results did not exceed NCGS and SA was not performed.

SWPT4: SWPT4 is a compliance surface water monitoring point associated with the proposed new C&D landfill. It has been included in sampling events as of April 2010. It will be eligible for statistical analysis within Set 3 (if necessary) once four background sampling events have been completed.

Zinc has been the only detected metal in SWPT4. Antimony exceeded GPS with an *estimated* result of 2.2 ug/l in April 2011. Cobalt exceeded GPS with an *estimated* result of 3.0 ug/l in October 2010. Vanadium exceeded GPS with *estimated* results of 5.4 and 2.4 ug/l in October 2010 and April 2011, respectively. For organics, only toluene has been detected at SWPT4. SWPT1 was not sampled during this event due to dry conditions.

TABLES

Table 1
Static Water Elevations for
Dunn/Erwin Landfill

Monitor Well	TOC Elevation	Ground Elevation	Screen Elevations		Static Water Elevations											
			Upper	Lower	9/1/86	23-Oct-94	16-Nov-94	10-Jan-95	17-Mar-95	28-Mar-95	27-Apr-95	03-Jun-95	07-Jul-95			
MW1	235.67	234.27	-	no schematic	-	210.37	211.17	211.97	212.07	210.77	210.67	210.67	210.67	210.67	210.67	
MW2	198.01	196.01	181.01	166.01	-	182.01	182.21	182.09	183.67	182.85	181.89	182.01	182.01	182.01	184.01	
MW3	182.16	180.16	171.16	161.16	-	175.66	176.36	176.76	176.66	175.91	175.49	176.56	176.56	176.56	176.16	
MW3R	181.52	179.44	168.52	158.52	-	-	-	-	-	-	-	-	-	-	-	
MW4	184.20	176.12	167.12	157.12	-	173.72	174.12	173.02	175.22	173.82	173.89	175.02	175.02	174.72	174.72	
MW5	188.75	186.75	167.75	152.75	-	173.45	173.15	172.75	172.75	172.08	172.25	173.75	173.75	173.75	173.75	
MW6	208.60	205.60	no schematic	-	-	192.20	192.10	192.25	194.65	193.70	193.60	192.60	192.60	192.60	194.60	
MW6B	209.73	207.24	199.73	189.73	-	-	-	-	-	-	-	-	-	-	-	
MW7	218.52	216.12	202.12	192.12	-	193.52	193.22	193.06	195.24	193.27	193.02	-	-	-	-	
MW7B	219.33	216.10	204.10	189.10	-	-	-	-	-	-	-	-	-	-	-	
MW8	218.71	216.01	207.01	192.01	-	201.01	200.71	200.51	202.56	201.21	201.70	-	-	-	201.31	
MW9	219.43	217.17	202.17	187.17	-	-	-	-	-	-	-	-	-	-	-	
MW10	214.54	211.57	203.57	188.57	-	-	-	-	-	-	-	-	-	-	-	
MW11	203.41	200.88	188.41	178.41	-	-	-	-	-	-	-	-	-	-	-	
MW12	172.48	169.95	162.48	152.48	-	-	-	-	-	-	-	-	-	-	-	
MW13	187.39	184.80	154.39	139.39	-	-	-	-	-	-	-	-	-	-	-	
MW14	170.91	168.59	162.91	142.91	-	-	-	-	-	-	-	-	-	-	-	
MW15	190.18	187.80	183.18	178.18	-	-	-	-	-	-	-	-	-	-	-	
MW16	195.61	194.20	188.54	170.54	-	-	-	-	-	-	-	-	-	-	-	
MW23B	169.98	168.37	154.97	144.97	188.20	192.81	191.91	190.47	189.81	190.61	190.61	191.11	191.11	191.31	191.31	
MW31	233.30	231.90	203.20	193.20	193.00	163.98	164.38	164.77	164.83	164.73	164.73	164.73	164.73	165.28	165.28	
MW32	183.84	182.20	148.81	138.81	212.00	210.80	211.60	211.30	212.80	212.22	210.97	210.97	210.97	212.30	212.30	
MW33	173.88	170.90	156.90	146.90	175.60	174.34	175.64	175.24	176.71	174.34	174.67	174.67	174.67	176.34	176.34	
MW34**	194.06	191.12	164.20	146.90	164.20	163.88	163.98	164.65	167.53	-	-	-	-	-	-	
MW35**	181.77	179.31	no schematic	-	-	-	-	-	-	-	-	-	-	-	-	
MW53	209.59	207.18	204.59	194.59	-	-	-	-	-	-	-	-	-	-	-	
MW56	198.11	195.59	194.11	184.11	-	-	-	-	-	-	-	-	-	-	-	
MW57	201.33	198.88	197.33	187.33	-	-	-	-	-	-	-	-	-	-	-	
MW58	193.35	191.03	188.35	178.35	-	-	-	-	-	-	-	-	-	-	-	
MW59	211.56	209.01	206.56	196.56	-	-	-	-	-	-	-	-	-	-	-	
Averages						185.21	185.43	185.30	186.50	187.13	186.96	185.96	185.96	187.95	187.95	

Notes: ** MW34 and MW35 Ground Elevation and TOC elevation are estimated from the contour map (Fig. 1).

denotes day of highest groundwater level (of total days sampled) for the particular MW

denotes day of lowest groundwater level (of total days sampled) for the particular MW

Well 7B replaced MW7 as of Sept. 1995. MW3R replaced MW3 as of Oct. 2005. MW6B replaced MW6 as of June 2010.

Table 1
Static Water Elevations for
Dunn/Erwin Landfill

Static Water Elevations													
Monitor Well	21-Aug-95	9/13/95**	20-Sep-95	18-Oct-95	09-Feb-96	03-Apr-96	07-Oct-96	15-Apr-97	29-Sep-97	07-Oct-98	23-Mar-99	13-Oct-99	20-Apr-00
MW1	209.92	211.07	209.87	211.37	213.25	212.10	211.10	210.12	210.42	210.56	212.21	210.50	211.70
MW2	181.81	181.82	181.91	181.51	183.89	183.07	182.52	182.01	183.71	182.36	183.91	184.02	183.67
MW3	175.96	176.05	176.16	175.96	177.25	177.22	177.80	176.03	176.77	176.62	176.91	177.37	176.85
MW3R	-	-	-	-	-	-	-	-	-	-	-	-	-
MW4	173.72	173.7	173.82	173.92	174.81	174.61	174.97	172.91	175.04	174.09	175.47	175.78	174.67
MW5	173.15	173.47	173.45	173.55	172.76	172.62	173.85	172.50	173.76	173.55	173.88	174.40	172.67
MW6	194.00	193.48	193.30	193.50	193.11	193.21	193.77	193.09	192.45	192.08	192.64	193.21	193.05
MW6B	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7	195.42	-	194.62	194.22	-	-	-	-	-	-	-	-	-
MW7B	-	197.88	194.93	194.53	194.71	195.25	195.64	195.11	193.55	193.78	192.86	193.02	191.46
MW8	201.91	201.46	201.36	201.11	201.39	201.68	201.36	201.31	200.97	201.67	202.79	202.77	203.01
MW9	-	-	-	-	-	-	-	-	-	-	-	-	-
MW10	-	-	-	-	-	-	-	-	-	-	-	-	-
MW11	-	-	-	-	-	-	-	-	-	-	-	-	-
MW12	-	-	-	-	-	-	-	-	-	-	-	-	-
MW13	-	-	-	-	-	-	-	-	-	-	-	-	-
MW14	-	-	-	-	-	-	-	-	-	-	-	-	-
MW15	-	-	-	-	-	-	-	-	-	-	-	-	-
MW16	193.01	193.26	183.51	191.61	-	189.96	193.29	190.70	192.79	192.96	190.01	192.91	190.49
MW23B	164.48	164.85	164.88	164.60	-	165.40	168.80	164.99	164.92	164.33	164.61	164.84	164.14
MW31	210.90	210.59	210.90	211.00	212.51	210.40	213.94	212.84	209.93	210.48	211.00	211.60	209.98
MW32	-	175.79	-	176.14	-	176.09	176.46	175.48	176.15	176.09	175.25	176.75	175.63
MW33	-	163.96	163.88	163.68	-	165.63	166.04	164.74	165.62	163.95	165.71	167.33	165.59
MW34**	-	-	-	-	-	-	190.88	188.76	190.93	190.90	189.20	191.34	189.21
MW35**	-	-	-	-	-	-	178.59	176.78	176.71	176.12	176.40	176.63	175.93
MW53	-	-	-	-	-	-	-	-	-	-	-	-	-
MW56	-	-	-	-	-	-	-	-	-	-	-	-	-
MW57	-	-	-	-	-	-	-	-	-	-	-	-	-
MW58	-	-	-	-	-	-	-	-	-	-	-	-	-
MW59	-	-	-	-	-	-	-	-	-	-	-	-	-
Averages	188.57	185.89	186.35	186.19	191.52	185.94	186.47	185.16	185.58	185.30	185.52	186.16	185.20

Notes: ** MW34 and MW35 Ground Elevation and TOC elevation are estimated from the contour map (Fig. 1).

denotes day of highest groundwater level (of total days sampled) for the particular MW

denotes day of lowest groundwater level (of total days sampled) for the particular MW

Well 7B replaced MW7 as of Sept. 1995. MW3R replaced MW3 as of Oct. 2005. MW6B replaced MW6 as of June 2010.

Table 1
Static Water Elevations for
Dunn/Erwin Landfill

Static Water Elevations													
Monitor Well	11-Oct-00	19-Apr-01	15-16-Oct-01	03-Apr-02	15-Oct-02	30-Apr-03	29-Oct-03	21-Apr-04	28-Oct-04	26-Apr-05	18-Oct-05	19-Apr-06	10/23-24/06
MW1	210.43	210.41	210.92	211.41	210.83	211.57	211.22	210.99	211.53	211.42	208.53	209.70	209.41
MW2	183.69	183.49	183.34	183.62	183.46	183.01	183.25	182.82	183.14	183.52	181.59	182.07	181.99
MW3	176.70	176.70	176.95	177.21	177.28	177.84	177.77	177.66	177.88	-	-	-	-
MW3R	-	-	-	-	-	-	-	-	-	-	177.12	175.64	176.43
MW4	174.66	174.54	174.73	175.19	175.57	175.68	175.78	176.98	176.58	174.35	174.45	174.33	174.88
MW5	173.90	172.66	174.10	173.14	174.40	173.55	175.15	175.61	176.26	173.18	174.19	172.64	173.98
MW6	192.74	192.62	192.70	192.68	192.15	194.11	192.75	192.81	192.95	193.12	191.99	192.50	192.17
MW6B	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7	-	-	-	-	-	-	-	-	-	-	-	-	-
MW7B	193.38	192.96	193.87	193.46	192.67	195.73	194.22	194.32	194.44	194.32	193.02	193.29	193.23
MW8	209.31	203.09	209.72	203.06	202.65	203.98	203.00	202.96	202.53	202.95	201.41	202.18	201.95
MW9	-	192.81	193.60	193.21	192.23	195.59	193.78	194.01	194.12	194.09	192.51	192.89	192.73
MW10	-	193.16	193.28	192.98	192.04	195.54	192.90	193.53	193.65	194.06	191.95	192.66	191.46
MW11	-	-	-	-	-	-	-	-	-	-	-	185.43	184.74
MW12	-	-	-	-	-	-	-	-	-	-	-	166.16	165.65
MW13	-	-	-	-	-	-	-	-	-	-	-	162.71	163.71
MW14	-	-	-	-	-	-	-	-	-	-	-	161.61	164.44
MW15	-	-	-	-	-	-	-	-	-	-	-	182.45	178.36
MW16	188.19	186.60	188.28	186.74	188.05	187.78	188.61	187.06	189.07	187.37	186.87	186.75	188.36
MW23B	164.67	164.06	164.39	164.46	164.58	164.35	164.18	164.23	163.67	163.94	163.67	163.96	163.87
MW31	210.96	210.27	211.21	210.12	210.40	211.03	210.55	209.86	211.30	211.02	209.58	209.72	210.45
MW32	161.78	178.28	181.19	178.21	181.12	178.80	181.02	178.31	181.06	180.40	180.81	178.01	180.64
MW33	165.59	165.63	164.43	165.20	164.68	166.21	164.08	164.53	164.45	165.65	163.66	164.44	163.92
MW34**	191.09	189.03	191.01	189.38	191.41	189.38	190.85	188.92	190.89	189.14	190.85	189.13	190.96
MW35**	176.46	175.85	176.18	176.25	176.37	176.14	175.97	176.02	175.46	175.73	175.46	175.75	175.66
MW53	-	-	-	-	-	-	-	-	-	-	-	-	-
MW56	-	-	-	-	-	-	-	-	-	-	-	-	-
MW57	-	-	-	-	-	-	-	-	-	-	-	-	-
MW58	-	-	-	-	-	-	-	-	-	-	-	-	-
MW59	-	-	-	-	-	-	-	-	-	-	-	-	-
Averages	186.20	186.01	187.05	186.25	186.46	187.08	186.77	186.51	187.00	187.14	185.74	182.46	182.68

Notes: ** MW34 and MW35 Ground Elevation and TOC elevation are estimated from the contour map (Fig. 1).

denotes day of highest groundwater level (of total days sampled) for the particular MW

denotes day of lowest groundwater level (of total days sampled) for the particular MW

Well 7B replaced MW7 as of Sept. 1995. MW3R replaced MW3 as of Oct. 2005. MW6B replaced MW6 as of June 2010.

Table 1
Static Water Elevations for
Dunn/Erwin Landfill

Static Water Elevations												
Monitor Well	02-May-07	24-Oct-07	23-Apr-08	16-Oct-08	22-Apr-09	22-Oct-09	#####	20-Oct-10	#####	27-Oct-12		
MW1	209.64	208.61	209.79	209.76	210.34	209.74	210.58	209.83	210.06	209.64		
MW2	182.33	179.47	183.19	182.31	182.59	181.62	183.08	182.84	183.56	180.69		
MW3	-	-	-	-	-	-	-	-	-	-		
MW3R	175.72	171.57	176.30	176.78	176.92	177.24	176.30	178.65	176.95	176.53		
MW4	174.39	171.22	174.97	176.16	177.07	177.11	174.8	-	177.22	177.16		
MW5	172.81	171.05	173.29	176.16	175.86	176.93	173.30	177.94	175.72	176.00		
MW6	191.75	191.84	193.61	192.48	193.59	192.22	193.00	-	-	-		
MW6B	-	-	-	-	-	-	-	192.60	192.80	192.56		
MW7	-	-	-	-	-	-	-	-	-	-		
MW7B	194.32	192.73	193.19	193.45	194.89	193.58	194.78	193.88	193.92	192.95		
MW8	202.15	201.13	203.23	202.68	202.92	201.80	202.86	202.45	203.00	201.73		
MW9	194.02	192.21	193.01	193.09	194.71	193.16	207.84	-	-	-		
MW10	193.70	191.86	194.30	193.08	194.81	192.75	203.75	202.60	202.89	-		
MW11	184.36	183.89	185.99	184.89	185.33	184.58	185.12	184.97	184.10	183.82		
MW12	166.23	163.37	166.25	166.59	167.90	167.22	167.38	166.90	167.00	166.03		
MW13	162.48	162.48	162.60	164.06	162.78	164.16	162.64	163.68	162.41	163.09		
MW14	163.61	160.85	163.61	164.77	163.42	164.24	163.02	163.89	163.17	161.20		
MW15	180.58	-	182.70	180.04	181.07	178.75	181.02	179.44	182.30	-		
MW16	187.21	187.62	188.23	188.67	187.28	188.71	187.31	188.63	186.86	188.23		
MW23B	163.70	160.58	163.99	164.29	164.33	164.20	164.25	164.27	164.29	160.51		
MW31	210.74	208.96	210.35	210.99	210.81	210.61	211.11	211.30	209.92	209.19		
MW32	178.74	180.63	178.68	180.94	178.53	180.86	178.38	181.08	178.43	180.57		
MW33	164.98	162.86	167.04	164.55	165.58	163.95	165.69	165.34	165.97	163.19		
MW34**	189.29	190.97	189.81	189.54	189.54	191.25	189.35	191.64	189.59	191.28		
MW35**	175.49	172.37	175.78	176.08	176.12	175.99	176.04	176.06	176.08	172.30		
MW53	-	-	-	-	-	-	-	187.59	186.21	185.48		
MW56	-	-	-	-	-	-	-	195.35	192.70	194.84		
MW57	-	-	-	-	-	-	-	192.79	193.42	190.64		
MW58	-	-	-	-	-	-	-	190.93	188.88	190.57		
MW59	-	-	-	-	-	-	-	206.39	205.76	206.19		
Averages	182.65	181.25	183.18	183.34	183.47	183.21	184.18	186.04	185.51	183.93		

Notes:
 ** MW34 and MW35 Ground Elevation and TOC elevation are estimated from the contour map (Fig. 1).
 denotes day of highest groundwater level (of total days sampled) for the particular MW
 denotes day of lowest groundwater level (of total days sampled) for the particular MW
 Well 7B replaced MW7 as of Sept. 1995. MW3R replaced MW3 as of Oct. 2005. MW6B replaced MW6 as of J

Table 1
Static Water Elevations for
Dunn/Erwin Landfill

Monitor Well	Min	Max	Ave	Range	Std Dev
MW1	208.53	215.67	210.77	7.14	1.2
MW2	179.47	184.02	182.67	4.55	1.0
MW3	175.49	178.16	176.82	2.67	0.7
MW3R	171.57	178.65	176.34	7.08	1.6
MW4	171.22	177.22	174.86	6.00	1.2
MW5	171.05	177.94	173.85	6.89	1.4
MW6	191.75	194.65	192.94	2.90	0.7
MW6B	To be added once more data are available				
MW7	193.02	195.42	193.95	2.40	0.9
MW7B	191.46	197.08	193.96	5.62	1.1
MW8	200.51	209.72	202.43	9.21	1.8
MW9	192.21	207.84	194.19	15.63	3.4
MW10	191.46	203.75	194.62	12.29	3.7
MW11	183.82	194.08	185.60	10.26	2.7
MW12	163.37	167.80	166.38	4.43	1.1
MW13	162.41	164.16	163.07	1.75	0.7
MW14	160.85	164.77	163.15	3.92	1.3
MW15	178.36	182.70	180.67	4.34	1.5
MW16	183.51	193.29	189.31	9.78	2.3
MW23B	160.51	166.80	164.26	6.29	1.0
MW31	208.96	213.94	210.92	4.98	1.0
MW32	174.34	181.16	178.01	6.82	2.3
MW33	162.86	167.53	164.92	4.67	1.1
MW34**	188.76	191.64	190.25	2.88	1.0
MW35**	172.30	178.59	175.89	6.29	1.1
MW53	To be added once more data are available				
MW56	To be added once more data are available				
MW57	To be added once more data are available				
MW58	To be added once more data are available				
MW59	To be added once more data are available				
Averages	180.74	186.94	183.33	6.20	1.50

Notes:

June 2010.

Table 1B
Piezometer Static Water Elevations for
Dunn/Erwin Landfill

Piez. No.	TOC El.	Gmd. El.	Screen Elev.		Average Water Level	Date Sampled										
			Upper	Lower		3/19/1991	3/26/1991	4/12/1991	6/27/1991	3/28/1995	4/27/1995	7/17/1995	8/21/1995			
40S	176.17	174.20	163.70	158.80	168.12	171.83	171.44	171.38	170.61	ND	ND	ND	ND	ND	ND	168.77
41S	208.58	205.90	192.40	187.40	192.65	192.83	192.85	192.89	192.21	194.33	193.48	193.48	193.48	193.48	193.48	192.68
42S	168.05	166.00	152.40	142.50	162.02	163.03	162.81	162.32	162.63	163.15	163.30	163.30	163.30	163.30	163.30	164.25
44S	184.20	182.41	172.40	167.10	179.62	180.86	180.79	179.20	180.46	179.83	179.70	179.70	179.70	179.70	179.70	180.90
45S	202.71	200.10	183.90	178.90	180.74	181.26	181.16	181.82	180.54	ND	181.51	181.51	181.51	181.51	181.51	180.91
46S	220.77	218.20	197.70	187.70	194.19	193.17	194.14	193.23	193.76	195.87	195.27	195.27	195.27	195.27	195.27	195.17
47S	189.89	188.21	178.60	168.60	181.33	184.25	183.81	183.46	181.83	184.82	184.39	184.39	184.39	184.39	184.39	180.89
48S	208.27	207.20	195.10	185.10	194.81	197.22	197.01	196.85	196.41	197.52	196.52	196.52	196.52	196.52	196.52	196.37
GP-24-W	198.27	193.94	189.94	184.94	190.38	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-25-W	200.69	196.45	191.45	186.45	191.58	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-27-W	207.41	203.01	195.01	185.01	190.81	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-28-W	204.26	199.79	194.79	184.79	191.96	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-30-W	208.76	204.44	198.44	188.44	192.73	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-31-W	199.44	195.24	190.24	185.24	190.78	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-33-W	212.15	207.94	195.94	185.94	191.88	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-34-W	210.15	205.77	197.77	187.77	192.47	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-35-W	193.87	189.65	187.65	182.65	189.54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-36-W	211.71	207.34	195.34	185.34	192.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-37-W	197.28	193.08	188.08	183.08	188.24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
GP-38-W	215.79	211.09	206.09	196.09	199.76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PZ-50	205.53	204.00	195.53	185.53	190.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PZ-51	179.75	177.24	168.75	153.75	169.32	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PZ-52	198.49	197.00	185.49	175.49	178.58	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PZ-53	201.27	198.96	186.27	181.27	183.74	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PZ-54	214.68	212.28	204.68	194.68		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PZ-55	212.43	210.08	205.43	195.43		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PZ-56	205.62	203.28	198.62	188.62		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PZ-57	204.75	202.37	194.75	184.75		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PZ-58	205.51	202.80	198.51	188.51		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PZ-59	205.71	203.22	195.71	185.71		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average																
Surficial	NA	NA	NA	NA	186.31	183.04	183.00	182.64	182.31	185.92	184.88	184.88	184.88	184.88	184.88	182.49
42D	167.96	165.80	126.60	116.70	152.77	148.23	148.08	148.07	147.68	ND	147.96	147.96	147.96	147.96	147.96	147.06
44D	184.28	182.61	143.40	133.50	173.26	173.13	171.86	171.17	170.30	170.16	170.16	170.16	170.16	170.16	170.16	170.48
46D	221.38	218.20	179.20	169.20	193.74	ND	ND	ND	ND	193.71	192.88	192.88	192.88	192.88	192.88	194.78
47D	190.10	189.16	145.20	135.20	162.99	163.39	161.38	161.13	161.03	ND	165.30	165.30	165.30	165.30	165.30	160.8
Average																
Deep	NA	NA	NA	NA	173.98	161.58	160.44	160.12	159.67	181.93	169.08	169.08	169.08	169.08	169.08	168.28
PB9	211.24		203.60	183.60	190.31	190.31	190.40	190.07	189.93							
NOTE:			Indicates LOW Water													
			Indicates HIGH Water													
			ND= No Data													

Table 1B
Piezometer Static Water Elevations for
Dunn/Erwin Landfill

Piez. No.	Date Sampled		10/5/1998	3/23/1999	10/14/1999	4/20/2000	10/11/2000	4/17/2001	9/13/2001	10/15/2001	4/3/2002	10/15/2002
	9/20/1995	10/19/1995										
40S	167.57	167.77	156.72	Dry	Dry	Dry	167.11	ND	ND	ND	ND	ND
41S	192.18	194.28	191.13	192.22	193.93	192.76	192.58	ND	ND	ND	ND	ND
42S	164.65	163.85	ND	ND	ND	ND	154.20	154.20	160.44	154.91	157.11	164.06
44S	180.3	180.4	172.88	180.95	181.56	181.18	180.01	180.91	181.31	180.67	181.06	179.82
45S	179.81	180.01	179.11	180.76	180.93	181.22	179.91	181.03	181.22	180.41	180.82	179.11
46S	194.47	193.97	192.15	192.37	196.41	ND	196.09	ND	ND	193.39	192.98	192.00
47S	179.49	179.89	180.42	184.53	ND	184.93	182.67	178.85	183.14	182.07	183.84	180.63
48S	196.27	196.07	ND	ND	ND	ND	ND	192.63	195.87	195.77	193.55	195.52
GP-24-W	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	190.09	ND
GP-25-W	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	190.95	ND
GP-27-W	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	190.10	ND
GP-28-W	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	190.79	ND
GP-30-W	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	191.61	ND
GP-31-W	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	190.34	ND
GP-33-W	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	190.74	ND
GP-34-W	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	191.52	ND
GP-35-W	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	189.35	ND
GP-36-W	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	190.84	ND
GP-37-W	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	187.98	ND
GP-38-W	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	196.89	ND
PZ-50	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PZ-51	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PZ-52	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PZ-53	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PZ-54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PZ-55	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PZ-56	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PZ-57	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PZ-58	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PZ-59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Average	181.84	182.03	178.74	186.17	188.71	185.02	180.92	177.52	180.40	181.20	187.81	181.86
Surficial	147.36	147.26	ND	ND	ND	ND	167.88	157.87	160.39	158.37	159.98	152.48
42D	171.18	171.28	170.87	173.11	174.02	172.59	174.03	172.17	173.61	174.32	173.55	174.63
44D	194.28	194.08	193.4	191.98	192.65	193.33	192.53	191.65	192.83	195.13	192.38	192.16
47D	161.10	160.60	162.22	161.64	ND	161.91	162.52	162.19	162.9	163.21	163.13	163.45
Average	168.48	168.31	178.40	175.58	193.34	175.94	174.26	170.97	172.43	172.76	172.26	170.68
Deep	---	---	---	---	---	---	---	---	---	---	---	---
PB9	---	---	---	---	---	---	---	---	---	---	---	---
NOTE:	Indicates LOW Water											
	Indicates HIGH Water											
	ND= No Data											

Table 1B
Piezometer Static Water Elevations for
Dunn/Erwin Landfill

Piez. No.	10/21/2009	4/20/2010	10/19/2010	4/20/2011	10/27/2011	RANGE	MIN	MAX	
40S	ND	ND	ND	ND	ND	14.96	156.72	171.68	
41S	191.59	193.24	192.28	192.93	191.22	4.21	190.37	194.58	
42S	ND	ND	ND	ND	ND	13.85	154.20	168.05	
44S	179.55	181.39	180.32	180.69	176.60	10.19	171.66	181.85	
45S	ND	ND	ND	ND	ND	3.52	179.11	182.63	
46S	ND	ND	ND	ND	ND	4.77	192.00	196.77	
47S	177.38	184.20	176.30	178.95	174.25	11.14	174.25	185.39	
48S	195.27	193.12	195.27	192.89	193.71	13.04	185.53	198.57	
GP-24-W	190.68	192.17	190.47	189.68	189.50	2.70	189.47	192.17	
GP-25-W	191.25	192.45	191.33	191.95	190.09	3.26	189.63	192.89	
GP-27-W	190.22	191.82	190.26	190.73	189.13	4.46	189.13	193.59	
GP-28-W	191.66	193.30	191.73	192.26	190.45	3.13	190.17	193.30	
GP-30-W	192.10	193.96	192.26	192.63	191.23	4.37	190.84	195.21	
GP-31-W	190.76	193.28	190.80	190.23	189.61	3.17	189.09	192.26	
GP-33-W	191.39	193.49	191.07	191.15	190.06	4.39	190.06	194.45	
GP-34-W	193.68	193.68	191.87	192.11	190.78	3.76	190.78	194.54	
GP-35-W	189.52	193.68	189.48	189.77	188.83	1.79	188.17	189.96	
GP-36-W	191.33	193.77	191.63	191.71	192.57	3.51	190.58	194.09	
GP-37-W	188.08	188.79	188.63	188.94	187.26	3.51	185.58	189.09	
GP-38-W	199.93	200.05	200.07	199.75	199.94	3.48	196.89	200.37	
PZ-50	ND	189.88	189.70	ND	ND	1.53	189.24	190.77	
PZ-51	170.14	168.89	170.33	168.55	169.53	2.50	168.33	170.83	
PZ-52	177.97	179.83	177.89	178.24	177.63	2.61	177.47	180.08	
PZ-53	183.21	184.42	184.20	183.84	182.67	2.66	182.36	185.02	
PZ-54	ND	ND	214.68	199.50	198.99				
PZ-55	ND	ND	212.43	198.02	198.05				
PZ-56	ND	ND	205.62	193.33	192.38				
PZ-57	ND	ND	204.75	194.05	192.68				
PZ-58	ND	ND	205.51	194.12	192.67				
PZ-59	ND	ND	205.71	193.72	192.26				
Average Surficial	188.15	189.53	192.89	189.99	188.88				
42D	ND	ND	ND	ND	ND	20.90	147.06	167.96	
44D	174.86	173.40	175.03	173.09	173.90	9.41	170.16	179.57	
46D	192.91	194.66	199.29	196.88	202.66	11.01	191.65	202.66	
47D	163.87	163.55	167.64	163.27	162.69	7.04	160.60	167.64	
Average Deep	177.21	177.20	180.65	177.75	179.75				
PB9	---	---	---	---	---	0.89	189.93	190.82	
NOTE:	Range is the difference in high and low water levels for piezometer								
	Indicates LOW Water								
	Indicates HIGH Water								
	ND= No Data								

To be added once more data available

Table 1C
Turbidity and Specific Conductivity Measurements
Dunn-Erwin MSW Landfill
Harnett County, North Carolina

	Oct-11			
	Turbidity	Temp.	pH	Conductivity
	<i>NTU</i>	<i>°C</i>	<i>pH</i>	<i>uMhos</i>
MW1	7	19	5.7	60
MW2	21	20	4.8	87
MW3R	4	20	5.2	135
MW4	9	22	4.7	68
MW5	10	22	6.4	162
MW6B	170	22	5.5	215
MW7B	40	20	5.1	1172
MW8	4.4	20	4.5	105
MW9	-	-	-	-
MW10	-	-	-	-
MW11	190	21	5.0	46
MW12	500	20	4.8	71
MW13	27.0	18	6.3	125
MW14	450	18	5.8	122
MW15	-	-	-	-
MW16	28	21	6.1	125
MW23B	45	20	5.4	46
MW31	650	20	5.4	25
MW32	190	20	5.7	48
MW33	14	20	5.2	72
MW34	8	20	5.7	82
MW35	33	19	5.7	935
MW53	90	22	5.3	109
MW56	400	21	5.0	85
MW57	950	23	4.4	184
MW58	700	20	5.6	76
MW59	1600	23	4.8	120
SWPT1	-	-	-	-
SWPT2	-	-	-	-
SWPT3	13	21	4.1	715
SWPT4	-	-	-	-

**Table 2
Harnett County Dunn-Erwin Landfill
Groundwater Velocity Data**

Well	Hydraulic Conductivity (cm/sec)		Effective Porosity (n values)				Hydraulic Gradient (i)	Estimated Velocity (cm/s)			
	(1)	(2)	(3)	(4)	(5)	(6)		(7)	(8)	(9)	(10)
MW1	7.9E-07	1.0E-03	0.1	0.2	0.3	0.4	3.3E-02	2.6E-07	1.3E-07	1.1E-04	8.3E-05
MW2	3.5E-05	1.0E-03	0.1	0.2	0.3	0.4	4.0E-02	1.4E-05	7.0E-06	1.3E-04	1.0E-04
MW3	1.2E-05	1.0E-03	0.1	0.2	0.3	0.4	8.0E-02	9.2E-06	4.6E-06	2.7E-04	2.0E-04
MW4	1.2E-05	1.0E-03	0.1	0.2	0.3	0.4	8.0E-02	9.9E-06	5.0E-06	2.7E-04	2.0E-04
MW5	4.0E-05	1.0E-03	0.1	0.2	0.3	0.4	1.0E-01	4.0E-05	2.0E-05	3.3E-04	2.5E-04
MW6	3.5E-05	1.0E-03	0.1	0.2	0.3	0.4	8.0E-02	2.8E-05	1.4E-05	2.7E-04	2.0E-04
MW7B	NA	1.0E-03	0.1	0.2	0.3	0.4	1.0E-02	NA	NA	3.3E-05	2.5E-05
MW8	2.0E-06	1.0E-03	0.1	0.2	0.3	0.4	1.3E-02	2.5E-07	1.3E-07	4.2E-05	3.1E-05
MW9		8.6E-04			0.25		1.5E-02			5.2E-05	
MW10		3.0E-06			0.25		1.7E-02			2.0E-07	
MW11		2.5E-05			0.25		4.8E-02			4.8E-06	
MW12		2.3E-05			0.25		4.4E-02			4.0E-06	
MW13		5.5E-06			0.25		6.1E-02			1.3E-06	
MW14		7.4E-07			0.25		6.5E-02			1.9E-07	
MW15		2.2E-05			0.25		2.6E-02			2.3E-06	
MW16	7.3E-08	1.0E-03	0.1	0.2	0.3	0.4	NA	NA	NA	NA	NA
MW23B	2.8E-04	1.0E-03	0.1	0.2	0.3	0.4	2.0E-02	5.6E-05	2.8E-05	6.7E-05	5.0E-05
MW31	3.2E-06	1.0E-03	0.1	0.2	0.3	0.4	2.5E-02	8.0E-07	4.0E-07	8.3E-05	6.3E-05
MW32	2.9E-06	1.0E-03	0.1	0.2	0.3	0.4	NA	NA	NA	NA	NA
MW33	4.1E-06	1.0E-03	0.1	0.2	0.3	0.4	NA	NA	NA	NA	NA
MW34	NA	NA	0.1	0.2	0.3	0.4	NA	NA	NA	NA	NA
MW35	NA	NA	0.1	0.2	0.3	0.4	NA	NA	NA	NA	NA

* Equation $V=Ki/in$ (cm/sec)

Where V = Mean groundwater velocity as calculated by the above equation
i = Hydraulic gradient (unitless), see note (7)
n = Effective porosity (unitless), see notes (3) through (6)
k = hydraulic conductivity, see notes (1) and (2)

Notes:

- NA refers to wells where data is unavailable
- (1) In situ hydraulic conductivity as estimated by Withers and Ravenel, "Evaluation of Groundwater Flow and Direction", November 1994
- (2) In situ site hydraulic conductivity as estimated for "Field Investigation of Contaminant Plume", October 1996, except MW9 and MW10 installed in March 2001, for which values are obtained from the Titan report.
MW11 - MW15 calculated by ENSOL, Inc., August 2006 (based on slug tests).
- (3) Estimated as the lower limit for effective porosity, n, by Withers and Ravenel, Evaluation of Groundwater Flow and Direction, November 1994
- (4) Estimated as the upper limit for effective porosity, n, by Withers and Ravenel, Evaluation of Groundwater Flow and Direction, November 1994
- (5) Lower limit of effective porosity estimation in "Field Investigation of Contaminant Plume", October 1996.
- (6) Upper limit of effective porosity estimation in "Field Investigation of Contaminant Plume", October 1996.
n=0.25 used for MW11 - MW15, which is average of other values.
- (7) Hydraulic gradient as estimated from groundwater contours based on groundwater data sampled in October 1995, except for wells MW11 - MW15, which were estimated from contours based on groundwater data from Jan 2007 - May 2008.
- (a) Velocity as estimated using Withers and Ravenel estimated hydraulic conductivity (1), the lower limit for effective porosity (3), and the corresponding hydraulic gradient estimated from Figure 1.
- (b) Velocity as estimated using Withers and Ravenel estimated hydraulic conductivity (1), the upper limit for effective porosity (4), and the corresponding hydraulic gradient estimated from Figure 1.
- (c) Velocity as estimated using estimated hydraulic conductivity (2), the effective porosity (5), and the corresponding hydraulic gradient estimated from Figure 1.
- (d) Velocity as estimated using estimated hydraulic conductivity (2), the effective porosity (6), and the corresponding hydraulic gradient estimated from Figure 1.
- (e) For MW9 and MW10 installed in March 2001, velocity was computed for values obtained from the Titan report.

Table 3
Notification Table
NC Groundwater Exceedances
Dunn-Erwin Landfill
Harnett County, North Carolina
October 2011

Constituent	2L STD	13B STD	SWSL	MW1	MW31	MW2	MW3	MW4	MW5	MW6B	MW7B	MW8	MW11	MW12	MW13	MW14
Inorganics																
Antimony	NE	1	6													
Beryllium	NE	4	1													5
Chromium	10	--	10													
Cobalt	NE	1	10			1.2	3	2	2.2	39	28	1.4		1.3	2.1	1.3
Lead	15	--	10								34					
Thallium	NE	0.28	5.5					0.32		0.35	1					
Vanadium	NE	0.3	25			0.89	0.33	0.62		10.9	0.85	0.96	6.2	14.5	1.1	18.3
Organics																
Benzene	1	--	1							6.7	6.9	4.9				
1,4-Dichlorobenzene	6	--	1							8						
1,1-Dichloroethane	6	--	5								142	37.6				
1,2-Dichloroethane	0.4	--	1						0.5							
Methylene chloride	5	--	1								70.2	39.3				
Tetrachloroethylene	0.7	--	1							6.9	5.7	4.6				
Trichloroethylene	3	--	1							7.1	10.5	4.7				
Vinyl chloride	0.03	--	1							8.2	7.2	2.6				

NE = Not Established
 All units are in (ug/L) unless noted.
 Values in italics are estimated.
 Only wells with exceedances shown.
 Only values > 2L or 13B STD shown.

Table 3
Notification Table
NC Groundwater Exceedances
Dunn-Erwin Landfill
Harnett County, North Carolina
October 2011

Constituent	2L STD	13B		MW53	MW56	MW57	MW58	MW59	SWPT3	Notes	
		STD	SWSL								
Inorganics											
Antimony	NE	1	6							Inorganics appear to be trace background, except for cobalt, chromium and lead in the corrective action area (MW6B, MW7Bm MW57-MW59. Other results were not previously SSI OBL when statistical analysis was used prior to April 2011. MW6B - MW10 are located within previously identified contaminant plume. This area is included in corrective action. MW53, MW56 - MW59 are new wells (as of Oct 2010) also associated correction action.	
Beryllium	NE	4	1								
Chromium	10	--	10			11	16	12			
Cobalt	NE	1	10	1.7	1.3	2.8	1.5	2.9	5		
Lead	15	--	10			16		29			
Thallium	NE	0.28	5.5								
Vanadium	NE	0.3	25	1.2	13.6	34	18.4	35	0.43		
Organics											
Benzene	1	--	1	3.4							
1,4-Dichlorobenzene	6	--	1								
1,1-Dichloroethane	6	--	5	9.8							
1,2-Dichloroethane	0.4	--	1								
Methylene chloride	5	--	1								
Tetrachloroethylene	0.7	--	1	0.9							
Trichloroethylene	3	--	1								
Vinyl chloride	0.03	--	1	2.1				1			

NE = Not Established
All units are in (ug/L) unless noted.
Values in italics are estimated.
Only wells with exceedances shown.
Only values > 2L or 13B STD shown.

Table 4
Groundwater Monitoring Well Data
Monitoring Well 2 (MW2)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW2 Detects		NCGS (ug/l)	# Detects	Averages
	SUM	Events			
SAMPLING DATES					
ORGANICS (ug/l)					
Acetone	0	37	6000	0	0
Benzene	0	37	1	0	0
Carbon Disulfide	0	37	700	0	0
Carbon Tetrachloride	0	37	0.3	0	0
Chlorobenzene	0	37	50	0	0
Chloroethane	0	37	3000	0	0
Chloromethane	0	37	3	0	0
1,2-Dibromoethane	0	37	0.02	0	0
1,4-Dichlorobenzene	0	37	6	0	0
cis-1,2-Dichloroethene	0	37	70	0	0
1,1-Dichloroethane	0	37	6	0	0
1,2-Dichloroethane	0	37	0.4	0	0
1,1-Dichloroethene	0	37	7	0	0
Methylene Chloride	0	37	5	0	0
Tetrachloroethylene	0	37	0.7	0	0
Toluene	0	37	600	0	0
1,1,1-Trichloroethane	0	37	200	0	0
Trichloroethylene	0	37	3	0	0
Trichloroflouromethane	0	37	2000	0	0
Vinyl Chloride	0	37	0.03	0	0
Xylenes	0	37	500	0	0
Dichlorodifluoromethane*	0	10	1000	0	0
Diethylphthalate*	13	10	6000	1	1.3
bis(2-ethylhexyl)phthalate*	0	10	3	0	0
NOTES					

Table 4
Groundwater Monitoring Well Data
Monitoring Well 2 (MW2)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW2 Detects		NCGS (ug/l)	# Detects	Averages
	SUM	Events			
SAMPLING DATES					
ORGANICS (ug/l)					
Acetone	0	37	6000	0	0
Benzene	0	37	1	0	0
Carbon Disulfide	0	37	700	0	0
Carbon Tetrachloride	0	37	0.3	0	0
Chlorobenzene	0	37	50	0	0
Chloroethane	0	37	3000	0	0
Chloromethane	0	37	3	0	0
1,2-Dibromoethane	0	37	0.02	0	0
1,4-Dichlorobenzene	0	37	6	0	0
cis-1,2-Dichloroethene	0	37	70	0	0
1,1-Dichloroethane	0	37	6	0	0
1,2-Dichloroethane	0	37	0.4	0	0
1,1-Dichloroethene	0	37	7	0	0
Methylene Chloride	0	37	5	0	0
Tetrachloroethylene	0	37	0.7	0	0
Toluene	0	37	600	0	0
1,1,1-Trichloroethane	0	37	200	0	0
Trichloroethylene	0	37	3	0	0
Trichloroflouromethane	0	37	2000	0	0
Vinyl Chloride	0	37	0.03	0	0
Xylenes	0	37	500	0	0
Dichlorodifluoromethane*	0	10	1000	0	0
Diethylphthalate*	13	10	6000	1	1.3
bis(2-ethylhexyl)phthalate*	0	10	3	0	0
NOTES					

Table 4
Groundwater Monitoring Well Data
Monitoring Well 3 (MW3)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW3 Detects		NCGS (ug/l)	# Detects	Averages
	SUM	Events			
SAMPLING DATES					
ORGANICS (ug/l)					
Acetone	0	36	6000	0	0
Benzene	0	36	1	0	0
Carbon Disulfide	64.4	36	700	1	1.79
Carbon Tetrachloride	0	37	0.3	0	0
Chlorobenzene	0	36	50	0	0
Chloroethane	0	36	3000	0	0
Chloromethane	0	36	3	0	0
1,2-Dibromoethane	0	36	0.02	0	0
1,4-Dichlorobenzene	0	36	6	0	0
cis-1,2-Dichloroethene	0	36	70	0	0
1,1-Dichloroethane	0	36	6	0	0
1,2-Dichloroethane	0	36	0.4	0	0
1,1-Dichloroethene	0	36	7	0	0
Methylene Chloride	0	36	5	0	0
Tetrachloroethylene	0	36	0.7	0	0
Toluene	0	36	600	0	0
1,1,1-Trichloroethane	0	36	200	0	0
Trichloroethylene	0	36	3	0	0
Trichloroflouromethane	0	36	2000	0	0
Vinyl Chloride	0	36	0.03	0	0
Xylenes	0	36	500	0	0
Dichlorodifluoromethane*	0	10	1000	0	0
Diethyphthalate*	0	10	6000	0	0
bis(2-ethylhexyl)phthalate*	0	10	3	0	0
NOTES					

Table 4
Groundwater Monitoring Well Data
Monitoring Well 4 (MW4)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW4 Detects		NCGS (ug/l)	# Detects	Averages
	SUM	Events			
SAMPLING DATES					
ORGANICS (ug/l)					
Acetone	0	37	6000	0	0
Benzene	0	37	1	0	0
Carbon Disulfide	48.8	37	700	3	1.32
Carbon Tetrachloride	0	37	0.3	0	0
Chlorobenzene	0	37	50	0	0
Chloroethane	0	37	3000	0	0
Chloromethane	0	37	3	0	0
1,2-Dibromoethane	0	37	0.02	0	0
1,4-Dichlorobenzene	0	37	6	0	0
cis-1,2-Dichloroethene	0	37	70	0	0
1,1-Dichloroethane	0	37	6	0	0
1,2-Dichloroethane	0	37	0.4	0	0
1,1-Dichloroethene	0	37	7	0	0
Methylene Chloride	0	37	5	0	0
Tetrachloroethylene	0	37	0.7	0	0
Toluene	0	37	600	0	0
1,1,1-Trichloroethane	0	37	200	0	0
Trichloroethylene	0	37	3	0	0
Trichloroflouromethane	0	37	2000	0	0
Vinyl Chloride	0	37	0.03	0	0
Xylenes	0	37	500	0	0
Dichlorodifluoromethane*	0	10	1000	0	0
Diethyphthalate*	26	10	6000	2	2.60
bis(2-ethylhexyl)phthalate*	0	10	3	0	0
NOTES					

Table 4
Groundwater Monitoring Well Data
Monitoring Well 5 (MW5)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW5 Detects		NCGS (ug/l)
	SUM	Events	
SAMPLING DATES			
ORGANICS (ug/l)			
Acetone	0	37	6000
Benzene	0	37	1
Carbon Disulfide	37.3	37	700
Carbon Tetrachloride	0	37	0.3
Chlorobenzene	0	37	50
Chloroethane	0	37	3000
Chloromethane	0	37	3
1,2-Dibromoethane	0	37	0.02
1,4-Dichlorobenzene	0	37	6
cis-1,2-Dichloroethene	0	37	70
1,1-Dichloroethane	0	37	6
1,2-Dichloroethane	0	37	0.4
1,1-Dichloroethene	0	37	7
Methylene Chloride	0	37	5
Tetrachloroethylene	0	37	0.7
Toluene	0	37	600
1,1,1-Trichloroethane	0	37	200
Trichloroethylene	0	37	3
Trichloroflouromethane	0	37	2000
Vinyl Chloride	0	37	0.03
Xylenes	0	37	500
Dichlorodifluoromethane*	0	10	1000
Diethyphthalate*	0	10	6000
bis(2-ethylhexyl)phthalate*	0	10	3
NOTES			

Table 4
Groundwater Monitoring Well Data
Monitoring Well 6 (MW6)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW6,6B Detects		NCGS (ug/l)	# Detects	Averages
	SUM	Events			
SAMPLING DATES					
ORGANICS (ug/l)					
Acetone	170	38	6000	1	4.47
Benzene	54.6	38	1	11	1.44
Carbon Disulfide	7.9	38	700	1	0.21
Carbon Tetrachloride	2.9	38	0.3	1	0.08
Chlorobenzene	135.6	38	50	7	3.57
Chloroethane	850.8	38	3000	17	22.39
Chloromethane	46	38	3	1	1.21
1,2-Dibromoethane	0	38	0.02	0	0.00
1,4-Dichlorobenzene	73.5	38	6	12	1.93
cis-1,2-Dichloroethene	298.7	38	70	17	7.86
1,1-Dichloroethane	1429.2	38	6	33	37.61
1,2-Dichloroethane	0	38	0.4	0	0.00
1,1-Dichloroethene	84.6	38	7	2	2.23
Methylene Chloride	1367.5	38	5	31	35.99
Tetrachloroethylene	102.5	38	0.7	19	2.70
Toluene	0	38	600	0	0.00
1,1,1-Trichloroethane	94.5	38	200	9	2.49
Trichloroethylene	203.64	38	3	27	5.36
Trichlorofluoromethane	0	38	2000	0	0.00
Vinyl Chloride	98.1	38	0.03	12	2.58
Xylenes (total)	447.8	38	500	14	11.78
Dichlorodifluoromethane*	42.1	23	1000	7	1.83
Diethylphthalate*	0	23	6000	0	0.00
bis(2-ethylhexyl)phthalate*	6.8	23	3	1	0.30
NOTES					

Table 4
Groundwater Monitoring Well Data
Monitoring Well 7,7B (MW7,7B)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW7,7B Detects		NCGS (ug/l)	# Detects	Averages
	SUM	Events			
SAMPLING DATES					
ORGANICS (ug/l)					
Acetone	0	36	6000	0	0
Benzene	64	36	1	11	1.777778
Carbon Disulfide	0	36	700	0	0
Carbon Tetrachloride	0	36	0.3	0	0
Chlorobenzene	49.3	36	50	8	1.369444
Chloroethane	783.2	36	3000	26	21.75556
Chloromethane	64	36	3	1	1.777778
1,2-Dibromoethane	0	36	0.02	0	0
1,4-Dichlorobenzene	12.9	36	6	7	0.358333
cis-1,2-Dichloroethene	76.2	36	70	8	2.116667
1,1-Dichloroethane	4201.3	36	6	34	116.7028
1,2-Dichloroethane	8.7	36	0.4	1	0.241667
1,1-Dichloroethene	188.6	36	7	20	5.238889
Methylene Chloride	1888.9	36	5	28	52.46944
Tetrachloroethylene	49	36	0.7	10	1.361111
Toluene	76.8	36	600	7	2.133333
1,1,1-Trichloroethane	600.7	36	200	17	16.68611
Trichloroethylene	203.2	36	3	25	5.644444
Trichloroflouromethane	138.4	36	2000	17	3.844444
Vinyl Chloride	56.2	36	0.03	10	1.561111
Xylenes	63.9	36	500	9	1.775
Dichlorodifluoromethane*	781.9	23	1000	19	33.99565
Diethyphthalate*	13	23	6000	1	0.565217
bis(2-ethylhexyl)phthalate*	24	23	3	1	1.043478
NOTES					

Table 4
Groundwater Monitoring Well Data
Monitoring Well 8 (MW8)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW8 Detects		NCGS (ug/l)	# Detects	Averages
	SUM	Events			
SAMPLING DATES					
ORGANICS (ug/l)					
Acetone	0	38	6000	0	0.00
Benzene	59.8	38	1	11	1.57
Carbon Disulfide	0	38	700	0	0.00
Carbon Tetrachloride	0	38	0.3	0	0.00
Chlorobenzene	0	38	50	0	0.00
Chloroethane	268.6	38	3000	14	7.07
Chloromethane	119.1	38	3	3	3.13
1,2-Dibromoethane	0	38	0.02	0	0.00
1,4-Dichlorobenzene	20.5	38	6	9	0.54
cis-1,2-Dichloroethene	176.5	38	70	10	4.64
1,1-Dichloroethane	1504.7	38	6	31	39.60
1,2-Dichloroethane	0	38	0.4	0	0.00
1,1-Dichloroethene	81	38	7	1	2.13
Methylene Chloride	1455.3	38	5	28	38.30
Tetrachloroethylene	55.9	38	0.7	11	1.47
Toluene	0	38	600	0	0.00
1,1,1-Trichloroethane	0	38	200	0	0.00
Trichloroethylene	95.7	38	3	14	2.52
Trichloroflouromethane	0	38	2000	0	0.00
Vinyl Chloride	10.9	38	0.03	7	0.29
Xylenes	5	38	500	1	0.13
Dichlorodifluoromethane*	20.4	23	1000	4	0.886957
Diethyphthalate*	0	23	6000	0	0
bis(2-ethylhexyl)phthalate*	0	23	3	0	0
NOTES					

Table 4
Groundwater Monitoring Well Data
Monitoring Well 9 (MW9)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW9 Detects		NCGS (ug/l)	# Detects	Averages
	SUM	Events			
SAMPLING DATES					
ORGANICS (ug/l)					
Acetone	0	19	6000	0	0
Benzene	114.8	19	1	15	6.042105
Carbon Disulfide	0	19	700	0	0
Carbon Tetrachloride	0	19	0.3	0	0
Chlorobenzene	231.6	19	50	17	12.18947
Chloroethane	423.2	19	3000	16	22.27368
Chloromethane	189	19	3	1	9.947368
1,2-Dibromoethane	14	19	0.02	1	0.736842
1,4-Dichlorobenzene	16.2	19	6	6	0.852632
cis-1,2-Dichloroethene	108.8	19	70	10	5.726316
1,1-Dichloroethane	1709.6	19	6	16	89.97895
1,2-Dichloroethane	11.8	19	0.4	1	0.621053
1,1-Dichloroethene	0	19	7	0	0
Methylene Chloride	1918.2	19	5	17	100.9579
Tetrachloroethylene	29	19	0.7	9	1.526316
Toluene	0	19	600	0	0
1,1,1-Trichloroethane	0	19	200	0	0
Trichloroethylene	120.4	19	3	18	6.336842
Trichlorofluoromethane	0	19	2000	0	0
Vinyl Chloride	50.8	19	0.03	7	2.673684
Xylenes	174.8	19	500	10	9.2
Dichlorodifluoromethane*	0	3	1000	0	NA
Diethylphthalate*	0	3	6000	0	NA
bis(2-ethylhexyl)phthalate*	0	3	3	0	NA
NOTES					

Table 4
Groundwater Monitoring Well Data
Monitoring Well 10 (MW10)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW10 Detects		NCGS (ug/l)	# Detects	Averages
	SUM	Events			
SAMPLING DATES					
ORGANICS (ug/l)					
Acetone	3279	21	6000	5	156.1429
Benzene	55.3	21	1	11	2.633333
Carbon Disulfide	0	21	700	0	0
Carbon Tetrachloride	0	21	0.3	0	0
Chlorobenzene	133.1	21	50	12	6.338095
Chloroethane	285.4	21	3000	9	13.59048
Chloromethane	0	21	3	0	0
1,2-Dibromoethane	0	21	0.02	0	0
1,4-Dichlorobenzene	18.4	21	6	7	0.87619
cis-1,2-Dichloroethene	266.5	21	70	19	12.69048
1,1-Dichloroethane	1347.2	21	6	18	64.15238
1,2-Dichloroethane	0	21	0.4	0	0
1,1-Dichloroethene	0	21	7	0	0
Methylene Chloride	936.5	21	5	15	44.59524
Tetrachloroethylene	58.3	21	0.7	7	2.77619
Toluene	25.3	21	600	3	1.204762
1,1,1-Trichloroethane	0	21	200	0	0
Trichloroethylene	40.8	21	3	7	1.942857
Trichloroflouromethane	0	21	2000	0	0
Vinyl Chloride	27.5	21	0.03	8	1.309524
Xylenes	145.9	21	500	9	6.947619
Dichlorodifluoromethane*	0	4	1000	0	NA
Diethyphthalate*	0	4	6000	0	NA
bis(2-ethylhexyl)phthalate*	0	4	3	0	NA
NOTES					

Table 4
Groundwater Monitoring Well Data
Monitoring Well 11 (MW11)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW11 Detects		NCGS (ug/l)	# Detects	Averages
	SUM	Events			
SAMPLING DATES					
ORGANICS (ug/l)					
Acetone	0	10	6000	0	0
Benzene	0	10	1	0	0
Carbon Disulfide	0	10	700	0	0
Carbon Tetrachloride	0	10	0.3	0	0
Chlorobenzene	0	10	50	0	0
Chloroethane	0	10	3000	0	0
Chloromethane	0	10	3	0	0
1,2-Dibromoethane	0	10	0.02	0	0
1,4-Dichlorobenzene	0	10	6	0	0
cis-1,2-Dichloroethene	0	10	70	0	0
1,1-Dichloroethane	0	10	6	0	0
1,2-Dichloroethane	0	10	0.4	0	0
1,1-Dichloroethene	0	10	7	0	0
Methylene Chloride	0	10	5	0	0
Tetrachloroethylene	0	10	0.7	0	0
Toluene	0	10	600	0	0
1,1,1-Trichloroethane	0	10	200	0	0
Trichloroethylene	0	10	3	0	0
Trichlorofluoromethane	0	10	2000	0	0
Vinyl Chloride	0	10	0.03	0	0
Xylenes	0	10	500	0	0
Dichlorodifluoromethane*	0	0	1000	0	NA
Diethylphthalate*	0	0	6000	0	NA
bis(2-ethylhexyl)phthalate*	0	0	3	0	NA
NOTES					

Table 4
Groundwater Monitoring Well Data
Monitoring Well 12 (MW12)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW12 Detects		NCGS (ug/l)	# Detects	Averages
	SUM	Events			
SAMPLING DATES					
ORGANICS (ug/l)					
Acetone	0	10	6000	0	0
Benzene	0	10	1	0	0
Carbon Disulfide	0	10	700	0	0
Carbon Tetrachloride	0	10	0.3	0	0
Chlorobenzene	0	10	50	0	0
Chloroethane	0	10	3000	0	0
Chloromethane	0	10	3	0	0
1,2-Dibromoethane	0	10	0.02	0	0
1,4-Dichlorobenzene	0	10	6	0	0
cis-1,2-Dichloroethene	0	10	70	0	0
1,1-Dichloroethane	0	10	6	0	0
1,2-Dichloroethane	0	10	0.4	0	0
1,1-Dichloroethene	0	10	7	0	0
Methylene Chloride	0	10	5	0	0
Tetrachloroethylene	0	10	0.7	0	0
Toluene	0	10	600	0	0
1,1,1-Trichloroethane	0	10	200	0	0
Trichloroethylene	0	10	3	0	0
Trichloroflouromethane	0	10	2000	0	0
Vinyl Chloride	0	10	0.03	0	0
Xylenes	0	10	500	0	0
Dichlorodifluoromethane*	0	0	1000	0	NA
Diethyphthalate*	0	0	6000	0	NA
bis(2-ethylhexyl)phthalate*	0	0	3	0	NA
NOTES					

Table 4
Groundwater Monitoring Well Data
Monitoring Well 13 (MW13)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW13 Detects		NCGS (ug/l)	# Detects	Averages
	SUM	Events			
SAMPLING DATES					
ORGANICS (ug/l)					
Acetone	0	10	6000	0	0
Benzene	0	10	1	0	0
Carbon Disulfide	0	10	700	0	0
Carbon Tetrachloride	0	10	0.3	0	0
Chlorobenzene	0	10	50	0	0
Chloroethane	0	10	3000	0	0
Chloromethane	0	10	3	0	0
1,2-Dibromoethane	0	10	0.02	0	0
1,4-Dichlorobenzene	0	10	6	0	0
cis-1,2-Dichloroethene	0	10	70	0	0
1,1-Dichloroethane	0	10	6	0	0
1,2-Dichloroethane	0	10	0.4	0	0
1,1-Dichloroethene	0	10	7	0	0
Methylene Chloride	0	10	5	0	0
Tetrachloroethylene	0	10	0.7	0	0
Toluene	0	10	600	0	0
1,1,1-Trichloroethane	0	10	200	0	0
Trichloroethylene	0	10	3	0	0
Trichloroflouromethane	0	10	2000	0	0
Vinyl Chloride	0	10	0.03	0	0
Xylenes	0	10	500	0	0
Dichlorodifluoromethane*	0	0	1000	0	NA
Diethyphthalate*	0	0	6000	0	NA
bis(2-ethylhexyl)phthalate*	0	0	3	0	NA
NOTES					

Table 4
Groundwater Monitoring Well Data
Monitoring Well 14 (MW14)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW14 Detects		NCGS (ug/l)	# Detects	Averages
	SUM	Events			
SAMPLING DATES					
ORGANICS (ug/l)					
Acetone	0	10	6000	0	0
Benzene	0	10	1	0	0
Carbon Disulfide	0	10	700	0	0
Carbon Tetrachloride	0	10	0.3	0	0
Chlorobenzene	0	10	50	0	0
Chloroethane	0	10	3000	0	0
Chloromethane	1	10	3	1	0.1
1,2-Dibromoethane	0	10	0.02	0	0
1,4-Dichlorobenzene	0	10	6	0	0
cis-1,2-Dichloroethene	0	10	70	0	0
1,1-Dichloroethane	0	10	6	0	0
1,2-Dichloroethane	0	10	0.4	0	0
1,1-Dichloroethene	0	10	7	0	0
Methylene Chloride	0	10	5	0	0
Tetrachloroethylene	0	10	0.7	0	0
Toluene	0	10	600	0	0
1,1,1-Trichloroethane	0	10	200	0	0
Trichloroethylene	0	10	3	0	0
Trichloroflouromethane	0	10	2000	0	0
Vinyl Chloride	0	10	0.03	0	0
Xylenes	0	10	500	0	0
Dichlorodifluoromethane*	0	0	1000	0	NA
Diethyphthalate*	0	0	6000	0	NA
bis(2-ethylhexyl)phthalate*	0	0	3	0	NA
NOTES					

Table 4
Groundwater Monitoring Well Data
Monitoring Well 15 (MW15)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW15 Detects		NCGS (ug/l)	# Detects	Averages
	SUM	Events			
SAMPLING DATES					
ORGANICS (ug/l)					
Acetone	144	8	6000	1	18.0
Benzene	0	8	1	0	0
Carbon Disulfide	0	8	700	0	0
Carbon Tetrachloride	0	8	0.3	0	0
Chlorobenzene	0	8	50	0	0
Chloroethane	0	8	3000	0	0
Chloromethane	0	8	3	0	0
1,2-Dibromoethane	0	8	0.02	0	0
1,4-Dichlorobenzene	0	8	6	0	0
cis-1,2-Dichloroethene	0	8	70	0	0
1,1-Dichloroethane	0	8	6	0	0
1,2-Dichloroethane	0	8	0.4	0	0
1,1-Dichloroethene	0	8	7	0	0
Methylene Chloride	0	8	5	0	0
Tetrachloroethylene	0	8	0.7	0	0
Toluene	196.3	8	600	5	24.5
1,1,1-Trichloroethane	0	8	200	0	0
Trichloroethylene	0	8	3	0	0
Trichloroflouromethane	0	8	2000	0	0
Vinyl Chloride	0	8	0.03	0	0
Xylenes	0	8	500	0	0
Dichlorodifluoromethane*	0	0	1000	0	NA
Diethyphthalate*	0	0	6000	0	NA
bis(2-ethylhexyl)phthalate*	0	0	3	0	NA
NOTES					

Table 4
Groundwater Monitoring Well Data
Monitoring Well 23B (MW23B)
Downgradient Well - Set 1
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW23B Detects		NCGS (ug/l)	# Detects	Averages
	SUM	Events			
SAMPLING DATES					
ORGANICS (ug/l)					
Acetone	0	36	6000	0	0
Benzene	0	36	1	0	0
Carbon Disulfide	0	36	700	0	0
Carbon Tetrachloride	0	36	0.3	0	0
Chlorobenzene	0	36	50	0	0
Chloroethane	0	36	3000	0	0
Chloromethane	0	36	3	0	0
1,2-Dibromoethane	0	36	0.02	0	0
1,4-Dichlorobenzene	0	36	6	0	0
cis-1,2-Dichloroethene	0	36	70	0	0
1,1-Dichloroethane	0	36	6	0	0
1,2-Dichloroethane	0	36	0.4	0	0
1,1-Dichloroethene	0	36	7	0	0
Methylene Chloride	0	36	5	0	0
Tetrachloroethylene	0	36	0.7	0	0
Toluene	0	36	600	0	0
1,1,1-Trichloroethane	0	36	200	0	0
Trichloroethylene	0	36	3	0	0
Trichlorofluoromethane	0	36	2000	0	0
Vinyl Chloride	0	36	0.03	0	0
Xylenes	0	36	500	0	0
Dichlorodifluoromethane*	0	2	1000	0	0
Diethylphthalate*	0	2	6000	0	0
bis(2-ethylhexyl)phthalate*	0	2	3	0	0
NOTES					

Table 4
Total Downgradient Detects and Averages
Set 1 Data
Dunn-Erwin MSW Landfill
Harnett County, NC

CONSTITUENT	# Detects	Average Conc	NCGS (ug/l)	Avg/NCGS
ORGANICS (ug/l)				
Acetone	7	11.91	6000	1.98E-03
Benzene	59	0.90	1	0.90
Carbon Disulfide	7	0.29	700	4.12E-04
Carbon Tetrachloride	1	0.00	0.3	0.00E+00
Chlorobenzene	44	1.56	50	0.03
Chloroethane	82	5.81	3000	1.94E-03
Chloromethane	7	1.08	3	0.36
1,2-Dibromoethane	1	0.05	0.02	2
1,4-Dichlorobenzene	41	0.30	6	5.07E-02
cis-1,2-Dichloroethene	64	2.20	70	0.03
1,1-Dichloroethane	132	23.20	6	3.87
1,2-Dichloroethane	2	0.06	0.4	0.14
1,1-Dichloroethene	23	0.64	7	0.09
Methylene Chloride	119	18.15	5	3.63
Tetrachloroethylene	56	0.66	0.7	0.94
Toluene	15	1.86	600	3.10E-03
1,1,1-Trichloroethane	26	1.28	200	0.01
Trichloroethylene	91	1.45	3	0.48
Trichlorofluoromethane	17	0.26	2000	1.28E-04
Vinyl Chloride	44	0.56	0.03	18.7
Xylenes	43	1.99	500	3.98E-03
Dichlorodifluoromethane**	30	4.59	1000	4.59E-03
Diethylphthalate**	4	0.56	6000	9.30E-05
bis(2-ethylhexyl)phthalate**	2	0.17	3	0.06

Table 4
Average Concentrations in Plume Wells
MW-6, MW-7B, MW-8, MW-9, and MW-10
Dunn-Erwin MSW Landfill
Harnett County, NC

CONSTITUENT	# Detects	Average Conc	NCGS	Avg/NCGS
ORGANICS (ug/l)				
Acetone	6	32.12	6000	5.35E-03
Benzene	59	2.69	1	2.69
Carbon Disulfide	1	0.04	700	5.94E-05
Carbon Tetrachloride	1	0.00	0.3	0.00E+00
Chlorobenzene	44	4.69	50	0.09
Chloroethane	82	17.42	3000	0.01
Chloromethane	6	3.21	3	1.07
1,2-Dibromoethane	1	0.15	0.02	7.37
1,4-Dichlorobenzene	41	0.91	6	1.52E-01
cis-1,2-Dichloroethene	64	6.61	70	0.09
1,1-Dichloroethane	132	69.61	6	11.60
1,2-Dichloroethane	2	0.17	0.4	0.43
1,1-Dichloroethene	23	1.92	7	0.27
Methylene Chloride	119	54.46	5	10.89
Tetrachloroethylene	56	1.97	0.7	2.81
Toluene	10	0.67	600	1.11E-03
1,1,1-Trichloroethane	26	3.83	200	0.02
Trichloroethylene	91	4.36	3	1.45
Trichlorofluoromethane	17	0.77	2000	3.84E-04
Vinyl Chloride	44	1.68	0.03	56.08
Xylenes	43	5.97	500	0.01
Dichlorodifluoromethane**	30	12.24	1000	0.01
Diethylphthalate**	1	0.19	6000	3.14E-05
bis(2-ethylhexyl)phthalate**	2	0.45	3	0.15

Table 5
Comparison of Standards, SWSL, Current and Historic Detection Limits
For selected Constituents
Dunn-Erwin Landfill
Harnett County, North Carolina
Oct-11

Constituent	2L STD	13B STD	SWSL	2011 MDL	2006 DL
Inorganics					
Antimony	NE	1	6	0.14	30
Arsenic	10	--	10	0.1	10
Barium	700	--	100	0.02	500
Beryllium	NE	4	1	0.02	2
Cadmium	2	--	1	0.02	1
Chromium	10	--	10	0.04	10
Cobalt	NE	1	10	0.03	10
Copper	1000	--	10	0.02	200
Lead	15	--	10	0.02	10
Nickel	100	--	50	0.04	50
Selenium	20	--	10	0.2	20
Silver	20	--	10	0.02	10
Thallium	NE	0.28	5.5	0.02	10
Vanadium	NE	0.3	25	0.14	40
Zinc	1000	--	10	0.24	50
Cyanide	70	--	10	5	50
Mercury	1	--	0.2	0.05	1
Tin	NE	2000	100	0.16	100
Organics					
Acetone	6000	--	100	9.06	100
Benzene	1	--	1	0.24	5
Carbon disulfide	700	--	100	0.23	100
Carbon Tetrachloride	0.3	--	1	0.22	10
Chlorobenzene	50	--	3	0.3	5
Chloroethane	3000	--	10	0.48	10
Methyl chloride	3	--	1	0.77	10
1,2-Dibromoethane	0.02	--	1	0.26	5
1,4-Dichlorobenzene	6	--	1	0.39	5
cis-1,2-Dichloroethene	70	--	5	0.25	5
1,1-Dichloroethane	6	--	5	0.2	5
1,2-Dichloroethane	0.4	--	1	0.21	5
1,1-Dichloroethene	7	--	5	0.17	5
Methylene chloride	5	--	1	0.64	10
Tetrachloroethylene	0.7	--	1	0.17	5
Toluene	600	--	1	0.23	5
1,1,1-Trichloroethane	200	--	1	0.19	5
Trichloroethylene	3	--	1	0.23	5
Trichlorofluoromethane	2000	--	1	0.24	5
Vinyl chloride	0.03	--	1	0.63	10
Xylenes (total)	500	--	5	0.68	5

NE = Not Established
All units are in (ug/L) unless noted.

FIGURES



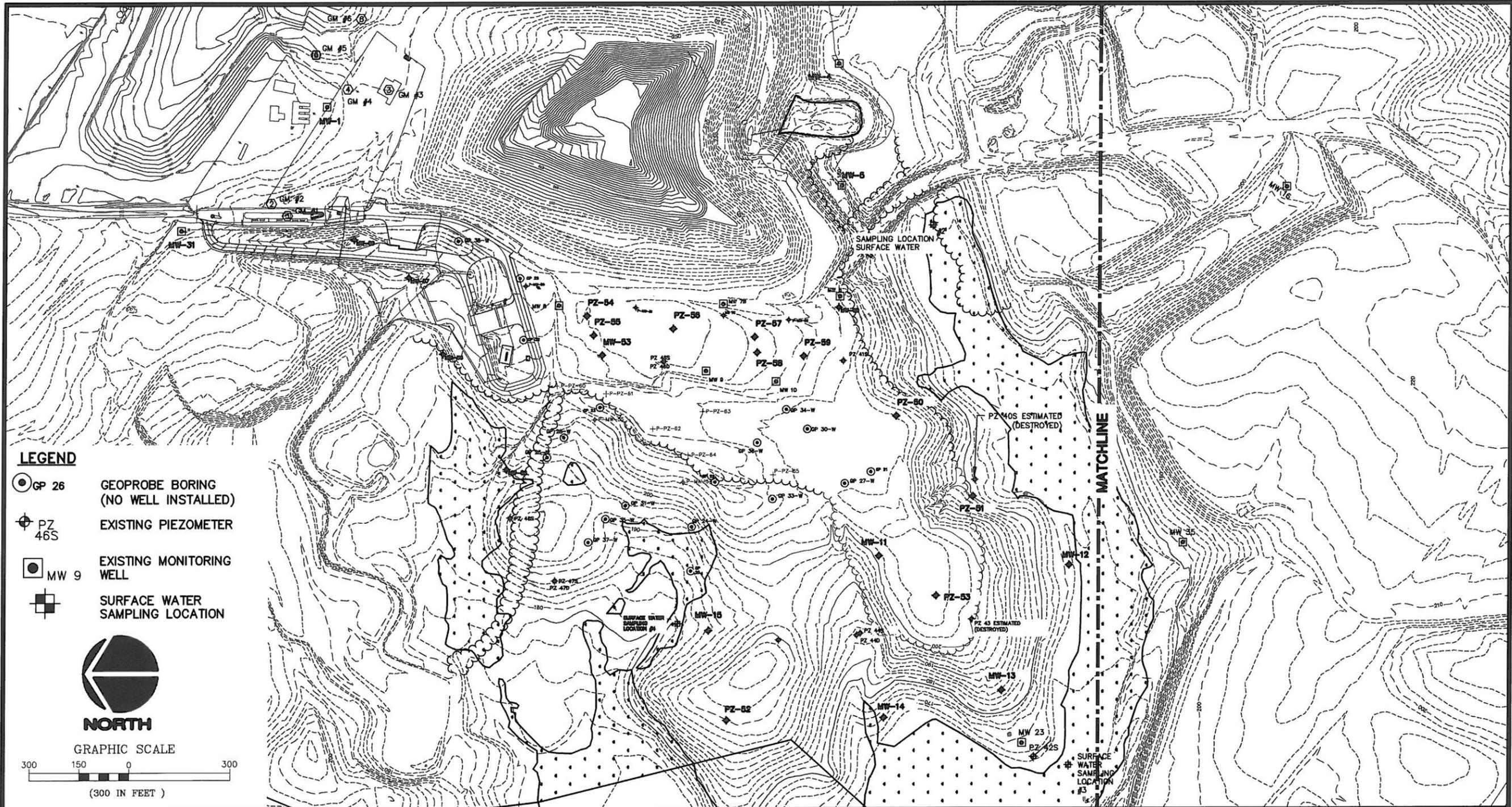
CLAYTON Engineering
Civil and Environmental
dba C. T. Clayton, Sr. PE, Inc.
PO Box 578 · Coats, North Carolina 27521
Phone 910-897-7070 · Fax 910-897-6767
License No. C-2570 · www.ctclayton.com
email: tyrus@ctclayton.com

DUNN-ERWIN LANDFILL LANDFILL LAYOUT

HARNETT COUNTY

NORTH CAROLINA

PROJECT # : 3002
 PROJ. ENG. : RS
 DRAWN BY : SBK
 FIELD BK. : -
 CAD FILE : 3035Mas Exhibit.DWG
 SCALE : 1" = 300'
 DATE : 4 MAY 2011
 FIGURE # : 1



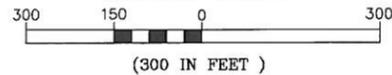
LEGEND

- GP 26 GEOPROBE BORING (NO WELL INSTALLED)
- ⊕ PZ 46S EXISTING PIEZOMETER
- MW 9 EXISTING MONITORING WELL
- ⊠ SURFACE WATER SAMPLING LOCATION



NORTH

GRAPHIC SCALE



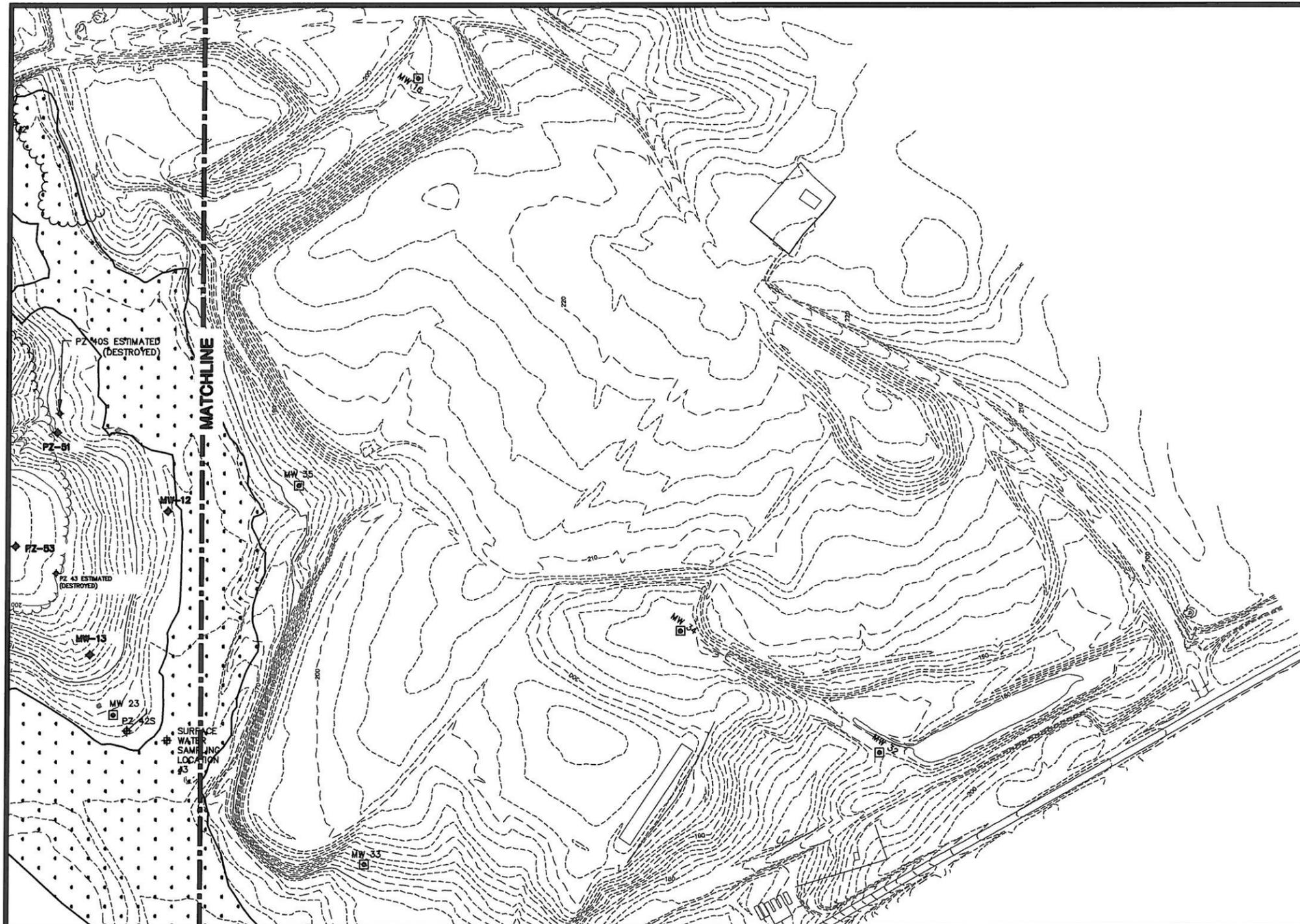
CLAYTON Engineering
 Civil and Environmental
 dba C. T. Clayton, Sr. PE, Inc.
 PO Box 578 • Coats, North Carolina 27521
 Phone 910-897-7070 • Fax 910-897-6767
 License No. C-2570 • www.ctclayton.com
 email: tyrus@ctclayton.com

**DUNN-ERWIN
 LANDFILL
 LANDFILL LAYOUT**

HARNETT COUNTY

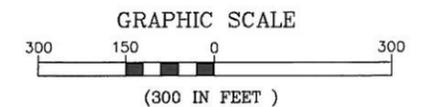
NORTH CAROLINA

PROJECT # : 3002
 PROJ. ENG. : RS
 DRAWN BY : SBK
 FIELD BK. : -
 CAD FILE : 3035Mas Exhibit.DWG
 SCALE : 1" = 300'
 DATE : 4 MAY 2011
 FIGURE # : 2A



LEGEND

- ⊙ GP 26 GEOPROBE BORING (NO WELL INSTALLED)
- ⊕ PZ 46S EXISTING PIEZOMETER
- ⊠ MW 9 EXISTING MONITORING WELL




CLAYTON
Engineering
 dba C. T. Clayton, Sr. PE, Inc.
 Civil and Environmental
 PO Box 578 · Coats, North Carolina 27521
 Phone 910-897-7070 · Fax 910-897-6767
 License No. C-2570 · www.ctclayton.com
 email: tyrus@ctclayton.com

DUNN-ERWIN
LANDFILL

LANDFILL LAYOUT

HARNETT COUNTY

NORTH CAROLINA

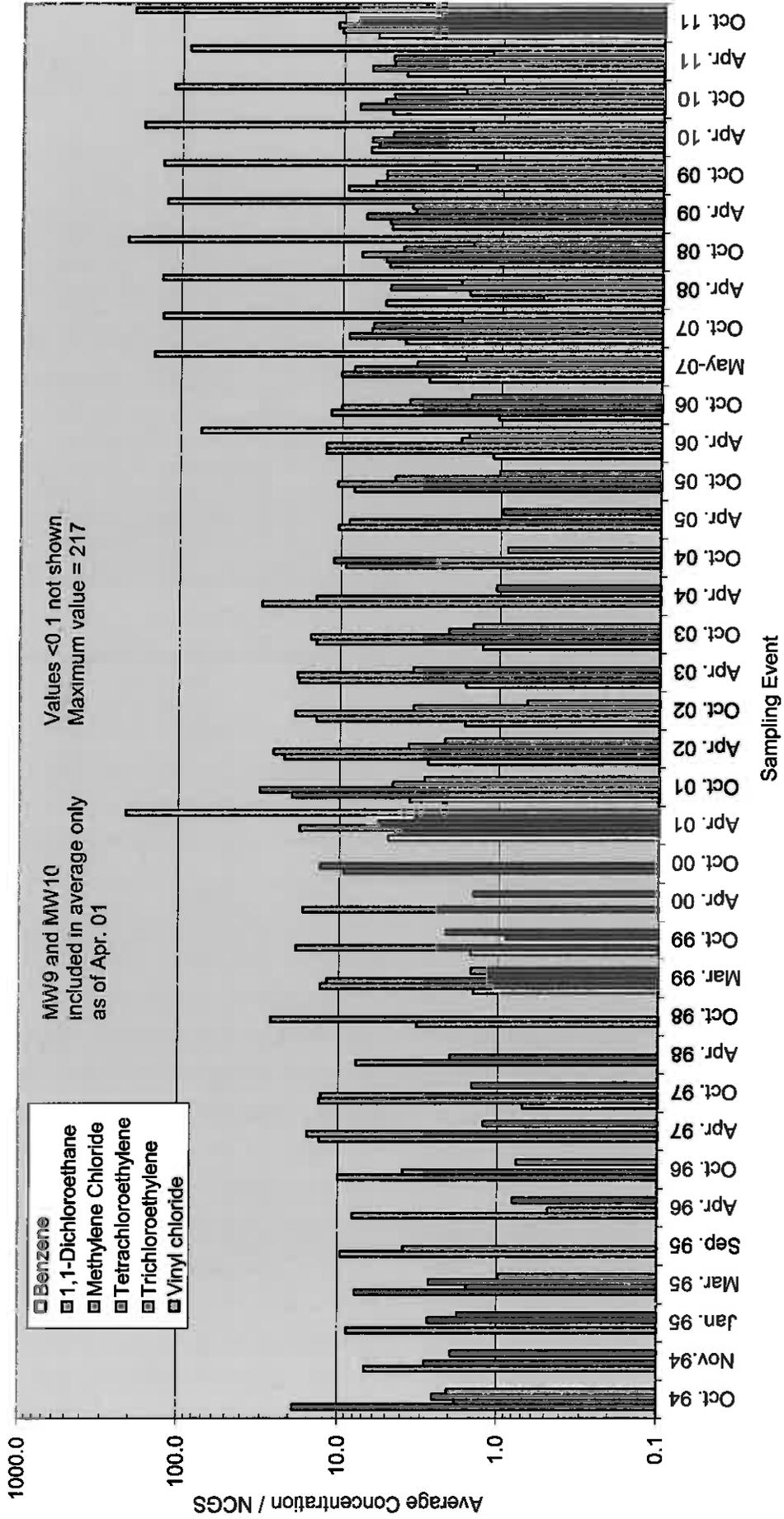
PROJECT # : 3002
 PROJ. ENG. : RS
 DRAWN BY : SBK
 FIELD BK. : -
 CAD FILE : 3035Mas Exhibit.DWG

 SCALE : 1" = 300'
 DATE : 4 MAY 2011

 FIGURE # : 2B

Figure 3

**Top Six, NCGS-Normalized Average Organics Concentrations per Sampling Event
Averages for Select Downgradient Wells (Contaminant Plume Area)
MW6B, MW7B, MW8, MW9, MW10
Dunn-Erwin Landfill, Hammett County**



APPENDIX A

DATA SET 1
(ALSO INCLUDING THE CAP AREA)

Groundwater Monitoring Well Data
 Monitoring Well 1 (MW1)
 Upgradient Well - Sat 1
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10	Oct. 10	Apr. 11	Oct. 11	MW1 detects detect#	detect%	NCGS (mg/l)
INORGANICS (mg/l)																				
Antimony																		0	0%	0.001**
Arsenic																		0	0%	0.01
Barium																		6	16%	0.7
Beryllium													0.001					12	32%	0.004**
Cadmium																		4	11%	0.002
Chromium																		5	14%	0.01
Cobalt																		1	3%	0.001**
Copper																		4	11%	1
Lead																		6	16%	0.015
Nickel																		1	3%	0.1
Selenium																		0	0%	0.02
Silver																		0	0%	0.02
Vanadium																		2	5%	0.0003**
Zinc		0.08						0.011										8	22%	1
I-Cyanide*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	0.07						
Mercury*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	0.001						
Thi*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	17%	2**						
ORGANICS (ug/l)																				
Acetone																		0	0%	6000
Benzene																		0	0%	1
Carbon Disulfide																		2	5%	700
Carbon Tetrachloride																		0	0%	0.3
Chlorobenzene																		0	0%	50
Chloroethane																		0	0%	3000
Chloromethane																		0	0%	3
1,2-Dibromoethane																		0	0%	0.02
1,4-Dichlorobenzene																		0	0%	6
cis-1,2-Dichloroethene																		0	0%	70
1,1-Dichloroethane																		0	0%	6
1,1-Dichloroethene																		0	0%	0.4
Methylene Chloride																		0	0%	7
Tetrachloroethylene																		0	0%	5
Toluene																		0	0%	600
1,1,1-Trichloroethane																		0	0%	200
Trichloroethylene																		0	0%	3
Trichlorofluoromethane																		0	0%	2000
Vinyl Chloride																		0	0%	0.03
Xylenes																		0	0%	500
Dichlorodifluoromethane*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	1000						
Difluorophthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3	90%	6000						
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	3						
																			NCGS =	
																			2L STD or	
																			** 13B GWPS as of Oct 07	

Groundwater Monitoring Well Data
 Monitoring Well 31 (MW31)
 Upgradient Well - Set 1
 Dunn-Erwin Landfill
 Harrett County, North Carolina

CONSTITUENT	MW31	Oct. 94	Nov. 94	Jan. 95	Mar. 95	Sep. 95	Dec. 95	Feb. 96	Apr. 96	July 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Oct. 00	Apr. 01	Oct. 01	Apr. 02	Oct. 02	Apr. 03
INORGANICS (mg/l)																								
Antimony							NA	NA		NA														
Arsenic					0.005							0.002	0.005											
Barium	0.04	0.028	0.157	0.097		0.006							0.098		0.1									
Beryllium												0.003	0.001		0.002		0.005							
Cadmium												0.00131												
Chromium						0.21																		
Cobalt																								
Copper	0.017	0.012	0.095	0.04	0.22				0.033				0.043		0.06	0.07								
Lead	0.011	0.006																						
Nickel																								
Selenium																								
Silver																								
Vanadium																								
Zinc	0.017	0.01	0.027	0.037	0.07								0.05		0.04	0.04	0.1							
l-Cyanide*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thi*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ORGANICS (ug/l)																								
Acetone																								
Benzene																								
Carbon Disulfide																								
Carbon Tetrachloride																								
Chlorobenzene																								
Chloroethane																								
Chloroethane																								
1,2-Dibromoethane																								
1,4-Dichlorobenzene																								
cis-1,2-Dichloroethene																								
1,1-Dichloroethane																								
1,2-Dichloroethane																								
1,1-Dichloroethene																								
Methylene Chloride																								
Tetrachloroethylene																								
Toluene																								
1,1,1-Trichloroethane																								
Trichloroethylene																								
Trichlorofluoromethane																								
Vinyl Chloride																								
Xylenes																								
Dichlorodifluoromethane*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethylphthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
* Indicates concentrations exceeding NCGS																								
"NE" - not established																								
"NA" - not applicable																								
* denotes an Appendix II constituent not included in Appendix I																								

Groundwater Monitoring Well Data
 Monitoring Well 31 (MW31)
 Upgradient Well - Set 1
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	SAMPLING DATES												MW31 Detects detect# / detect%	NCGS (mg/l)				
	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09			Oct. 09	Apr. 10	Oct. 10	Apr. 11
INORGANICS (mg/l)																		
Antimony																		0
Arsenic																		0.001**
Barium																		0.01
Beryllium																		0.7
Cadmium																		0.004**
Chromium																		0.002
Cobalt																		0.01
Copper																		0.001**
Lead																		1
Nickel																		0.015
Selenium																		0.1
Silver																		0.02
Vanadium																		0.02
Zinc																		0.0003**
I-Cyanide*																		1
Mercury*																		0.07
Tin*																		0.001
																		2**
ORGANICS (ug/l)																		
Acetone																		6000
Benzene																		1
Carbon Disulfide																		700
Carbon Tetrachloride																		0.3
Chlorobenzene																		50
Chloroethane																		3000
Chloromethane																		3
1,2-Dibromoethane																		0.02
1,4-Dichlorobenzene																		6
cis-1,2-Dichloroethene																		70
1,1-Dichloroethane																		6
1,2-Dichloroethane																		0.4
1,1-Dichloroethene																		7
Methylene Chloride																		5
Tetrachloroethylene																		0.7
Toluene																		600
1,1,1-Trichloroethane																		200
Trichloroethylene																		3
Trichlorofluoromethane																		2000
Vinyl Chloride																		0.03
Xylenes																		500
Dichlorodifluoromethane*																		1000
Diethylphthalate*																		6000
bis(2-ethylhexyl)phthalate*																		3

** 13B GWPS as of Oct 07

Groundwater Monitoring Well Data
 Monitoring Well 3 (MW3)
 Downgradient Well - Set 1
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	MW3R					MW3R					MW3 Detects detect# detect%	NCGS (mg/l)								
	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08			Oct. 08	Apr. 09	Oct. 09	Apr. 10	Oct. 10	Apr. 11	Oct. 11	
INORGANICS (mg/l)																				
Antimony																		0	0%	0.001**
Arsenic																		0	0%	0.01
Barium																		8	22%	0.7
Beryllium	0.005	0.005	0.006															30	83%	0.004**
Cadmium																		3	8%	0.002
Chromium																		4	11%	0.01
Cobalt																		2	6%	0.001**
Copper																		2	6%	1
Lead																		3	8%	0.015
Nickel																		0	0%	0.1
Selenium																		0	0%	0.02
Silver																		0	0%	0.02
Vanadium																		2	6%	0.0003**
Zinc																		16	44%	1
t-Cyanide*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	0.07						
Mercury*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	0.001						
Tin*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	2**						
ORGANICS (ug/l)																				
Acetone																		0	0%	6000
Benzene																		0	0%	1
Carbon Disulfide																		1	3%	700
Carbon Tetrachloride																		0	0%	0.3
Chlorobenzene																		0	0%	50
Chloroethane																		0	0%	3000
Chloromethane																		0	0%	3
1,2-Dibromoethane																		0	0%	0.02
1,4-Dichlorobenzene																		0	0%	6
cis-1,2-Dichloroethane																		0	0%	70
1,1-Dichloroethane																		0	0%	6
1,2-Dichloroethane																		0	0%	0.4
1,1-Dichloroethane																		0	0%	7
Methylene Chloride																		0	0%	5
Tetrachloroethylene																		0	0%	0.7
Toluene																		0	0%	600
1,1,1-Trichloroethane																		0	0%	200
Trichloroethylene																		0	0%	3
Trichlorofluoromethane																		0	0%	2000
Vinyl Chloride																		0	0%	0.03
Xylenes																		0	0%	500
Dichlorodifluoromethane*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	1000						
Diethylphthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	6000						
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	3						

NCGS =
 2L STD of
 ** 13B GWPS as of Oct 07

Groundwater Monitoring Well Data
 Monitoring Well 4 (MW4)
 Downgradient Well - Set 1
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	MW4	Oct. 94	Nov. 94	Jan. 95	Mar. 95	Sept. 95	Dec. 95	Feb. 96	Apr. 96	July 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Oct. 00	Apr. 01	Oct. 01	Apr. 02	Oct. 02	Apr. 03
INORGANICS (mg/l)																								
Antimony							NA	NA		NA														
Arsenic							NA	NA		NA														
Barium			0.47	0.07	0.041		NA	NA		NA			0.127			0.1								
Beryllium	0.106	0.003	0.003	0.003	0.003	0.006	NA	NA	0.006	NA	0.014	0.006	0.009	0.003	0.004	0.01	0.012	0.003	0.002	0.003	0.003	0.003	0.003	0.003
Cadmium	0.003	0.001					NA	NA		NA			0.01			0.01								
Chromium							NA	NA		NA														
Cobalt							NA	NA		NA			0.01											
Copper	0.01	0.039	0.005	0.006	0.006		NA	NA		NA			0.01			0.01								
Lead	0.004		0.002	0.002			NA	NA		NA			0.01			0.01								
Nickel							NA	NA		NA														
Selenium							NA	NA		NA														
Silver							NA	NA		NA														
Vanadium							NA	NA		NA														
Zinc	0.026	0.093	0.028	0.028	0.028		NA	NA	0.052	0.042						0.04	0.12							
t-Cyanide*	NA	NA	NA	NA	NA		NA	NA	NA	NA						NA								
Mercury*	NA	NA	NA	NA	NA		NA	NA	NA	NA						NA								
Tin*	NA	NA	NA	NA	NA		NA	NA	NA	NA						NA								
ORGANICS (ug/l)																								
Acetone							NA	NA		NA														
Benzene							NA	NA		NA														
Carbon Disulfide							NA	NA		NA														
Carbon Tetrachloride			21.3	21.3	6.2		NA	NA		NA														
Chlorobenzene							NA	NA		NA														
Chloroethane							NA	NA		NA														
Chloromethane							NA	NA		NA														
1,2-Dibromoethane							NA	NA		NA														
1,4-Dichlorobenzene							NA	NA		NA														
cis-1,2-Dichloroethene							NA	NA		NA														
1,1-Dichloroethane							NA	NA		NA														
1,2-Dichloroethane							NA	NA		NA														
1,1-Dichloroethene							NA	NA		NA														
Methylene Chloride							NA	NA		NA														
Tetrachloroethylene							NA	NA		NA														
Toluene							NA	NA		NA														
1,1,1-Trichloroethane							NA	NA		NA														
Trichloroethylene							NA	NA		NA														
Trichlorofluoromethane							NA	NA		NA														
Vinyl Chloride							NA	NA		NA														
Xylenes							NA	NA		NA														
Dichlorodifluoromethane*	NA	NA	NA	NA	NA		NA	NA		NA						NA								
Diethylphthalate*	NA	NA	NA	NA	NA	13	NA	NA		13						NA								
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA	NA		NA	NA		NA						NA								
- indicates concentrations exceeding NCGS																								
- not established																								
"NE" - not applicable																								
* - denotes an Appendix II constituent not included in Appendix I																								

Groundwater Monitoring Well Data
 Monitoring Well 5 (MW5)
 Downgradient Well - Set 1
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	MW5	Oct. 94	Nov. 94	Jan. 95	Mar. 95	Sep. 95	Dec. 95	Feb. 96	Apr. 96	July 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Oct. 00	Apr. 01	Oct. 01	Apr. 02	Oct. 02	Apr. 03	
INORGANICS (mg/l)																									
Antimony							NA	NA		NA															
Arsenic							NA	NA		NA															
Barium	0.208	0.142	0.243	0.104			NA	NA		NA															
Beryllium							NA	NA		NA															
Cadmium			0.001				NA	NA		NA															
Chromium	0.008						NA	NA	0.001	NA															
Cobalt							NA	NA		NA															
Copper	0.017	0.006	0.007	0.006			NA	NA		NA															
Lead	0.008	0.002	0.008	0.08			NA	NA		NA															
Nickel							NA	NA		NA															
Selenium							NA	NA		NA															
Silver							NA	NA		NA															
Vanadium							NA	NA		NA															
Zinc	0.027	0.019	0.026	0.01			NA	NA		NA															
t-Cyanide*	NA	NA	NA	NA			NA	NA		NA															
Mercury*	NA	NA	NA	NA			NA	NA		NA															
Tin*	NA	NA	NA	NA			NA	NA		NA															
ORGANICS (ug/l)																									
Acetone							NA	NA		NA															
Benzene							NA	NA		NA															
Carbon Disulfide			30.5				NA	NA		NA															
Carbon Tetrachloride							NA	NA		NA															
Chlorobenzene							NA	NA		NA															
Chloroethane							NA	NA		NA															
Chloromethane							NA	NA		NA															
1,2-Dibromoethane							NA	NA		NA															
1,4-Dichlorobenzene							NA	NA		NA															
cis-1,2-Dichloroethene							NA	NA		NA															
1,1-Dichloroethane							NA	NA		NA															
1,2-Dichloroethane							NA	NA		NA															
1,1-Dichloroethene							NA	NA		NA															
Methylene Chloride							NA	NA		NA															
Tetrachloroethylene							NA	NA		NA															
Toluene							NA	NA		NA															
1,1,1-Trichloroethane							NA	NA		NA															
Trichloroethylene							NA	NA		NA															
Trichlorofluoromethane							NA	NA		NA															
Vinyl Chloride							NA	NA		NA															
Xylenes							NA	NA		NA															
Dichlorodifluoromethane*	NA	NA	NA	NA			NA	NA		NA															
Diethylphthalate*	NA	NA	NA	NA			NA	NA		NA															
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA			NA	NA		NA															
- indicates concentrations exceeding NCGS																									
- not established																									
- not applicable																									
-denotes an Appendix II constituent not included in Appendix I																									

Groundwater Monitoring Well Data
 Monitoring Well 5 (MW5)
 Downgradient Well - Set 1
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10	Oct. 10	Apr. 11	Oct. 11	MW5 Detects detect#	detect%	NCGS
INORGANICS (mg/l)																				(mg/l)
Antimony																		0	0%	0.001**
Arsenic																	1	3%	0.01	
Barium																	17	46%	0.7	
Beryllium																	5	14%	0.004**	
Cadmium																	2	5%	0.002	
Chromium																	1	3%	0.01	
Cobalt																	0	0%	0.001**	
Copper																	4	11%	1	
Lead																	4	11%	0.015	
Nickel																	1	3%	0.1	
Selenium																	0	0%	0.02	
Silver																	0	0%	0.02	
Vanadium																	1	3%	0.0003**	
Zinc											0.014						6	16%	1	
l-Cyanide*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	0.07							
Mercury*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	0.001							
Tin**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	2**							
ORGANICS (ug/l)																				(ug/l)
Acetone																		0	0%	6000
Benzene																	0	0%	1	
Carbon Disulfide																	2	5%	700	
Carbon Tetrachloride																	0	0%	0.3	
Chlorobenzene																	0	0%	50	
Chloroethane																	0	0%	3000	
Chloromethane																	0	0%	3	
1,2-Dibromoethane																	0	0%	0.02	
1,4-Dichlorobenzene																	0	0%	6	
cis-1,2-Dichloroethene																	0	0%	70	
1,1-Dichloroethane																	0	0%	6	
1,1-Dichloroethene																	0	0%	0.4	
Methylene Chloride																	0	0%	5	
Tetrachloroethylene																	0	0%	0.7	
Toluene																	0	0%	600	
1,1,1-Trichloroethane																	0	0%	200	
Trichloroethylene																	0	0%	600	
Trichlorofluoromethane																	0	0%	3	
Vinyl Chloride																	0	0%	2000	
Xylenes																	0	0%	0.03	
Dichlorodifluoromethane*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	500							
Diethylphthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	1000							
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	0%	6000							
																	0	0%	3	
																				NCGS =
																				2L STD of
																				** 13B GWPS as of Oct 07

Groundwater Monitoring Well Data
 Monitoring Well 6,6B (MW6,6B)
 Downgradient Well - Set 1
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	MW6,6B																								
	Oct. 94	Nov. 94	Jan. 95	Mar. 95	Sep. 95	Dec. 95	Feb. 96	Apr. 96	July 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Oct. 00	Apr. 01	Oct. 01	Apr. 02	Oct. 02	Apr. 03		
INORGANICS (mg/l)																									
Antimony																									
Arsenic																									
Barium	0.088	0.086	0.141	0.005	0.062																				
Beryllium																									
Cadmium																									
Chromium	0.003			0.005																					
Cobalt																									
Copper		0.019	0.01	0.008																					
Lead	0.009			0.007																					
Nickel	0.005																								
Selenium																									
Silver																									
Vanadium																									
Zinc	0.038	0.047	0.029	0.018																					
t-Cyanide*	NA	NA	NA																						
Mercury*	NA	NA	NA																						
Tin*	NA	NA	NA																						
ORGANICS (ug/l)																									
Acetone																									
Benzene																									
Carbon Disulfide		7.9																							
Carbon Tetrachloride																									
Chlorobenzene		4	8.5		38																				
Chloroethane																									
Chloromethane																									
1,2-Dibromoethane																									
1,4-Dichlorobenzene																									
cis-1,2-Dichloroethene																									
1,1-Dichloroethane																									
1,1-Dichloroethene																									
Methylene Chloride																									
Tetrachloroethylene																									
Toluene																									
1,1,1-Trichloroethane	15.4	16	15.1	8.3	10																				
Trichloroethylene																									
Trichloroauronmethane																									
Vinyl Chloride																									
Xylenes	46.7	83.8	68.9	74.8	24																				
Dichlorodifluoromethane*	NA	NA	NA	NA	6.4																				
Diethylphthalate*	NA	NA	NA	NA	NA																				
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA	NA																				

* - indicates concentrations exceeding NCGS
 "INE" - not established
 "NA" - not applicable
 * - denotes an Appendix II constituent not included in Appendix I

Groundwater Monitoring Well Data
 Monitoring Well 6.6B (MW6.6B)
 Downgradient Well - Set 1
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	SAMPLING DATES										MW6.6B Detects defect#	NCGS					
	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08			Oct. 08	Apr. 09	Oct. 09	Apr. 10	Oct. 10
INORGANICS (mg/l)																	
Antimony																	
Arsenic																	
Barium																	
Beryllium																	
Cadmium																	
Chromium																	
Cobalt																	
Copper																	
Lead																	
Nickel																	
Selenium																	
Silver																	
Vanadium																	
Zinc																	
t-Cyanide*	NA	NA	NA	NA	NA	NA	NA	0.015	0.016	NA	NA	NA	NA	NA	NA	NA	NA
Mercury*	0.0006	NA	NA	NA	NA	NA	NA	0.00036	NA	NA	NA	NA	0.0008	NA	NA	NA	NA
Tin*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ORGANICS (ug/l)																	
Acetone																	
Benzene																	
Carbon Disulfide																	
Carbon Tetrachloride																	
Chlorobenzene																	
Chloroethane																	
Chloromethane																	
1,2-Dibromoethane																	
1,4-Dichlorobenzene																	
cis-1,2-Dichloroethane																	
1,1-Dichloroethane																	
1,2-Dichloroethane																	
1,1-Dichloroethene																	
Methylene Chloride																	
Tetrachloroethylene																	
Toluene																	
1,1,1-Trichloroethane																	
Trichloroethylene																	
Trichlorofluoromethane																	
Vinyl Chloride																	
Xylenes																	
Dichlorodifluoromethane*																	
Diethylphthalate*																	
bis(2-ethylhexyl)phthalate*																	

** 13B GWPS as of Oct 07

Groundwater Monitoring Well Data
 Monitoring Well 7.7B (MW7.7B)
 Downgradient Well - Set 1
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10	Oct. 10	Apr. 11	Oct. 11	MW7.7B Detects detect# / detect%	NCGS (mg/l)		
INORGANICS (mg/l)																					
Antimony																		0	0%	0.001**	
Arsenic																		5	15%	0.01	
Barium								0.341	0.345	0.268	0.64	0.626	0.453	0.364	0.260	0.265	0.318	16	47%	0.7	
Beryllium																		4	12%	0.004**	
Cadmium															0.001			5	15%	0.002	
Chromium																		12	35%	0.01	
Cobalt																		29	85%	0.001**	
Copper																		4	12%	1	
Lead											0.010	0.015	0.014	0.038	0.077	0.013	0.008	29	85%	0.015	
Nickel																		1	3%	0.1	
Selenium																		0	0%	0.02	
Silver																		0	0%	0.02	
Vanadium																		0	0%	0.02	
Zinc																		7	21%	0.0003**	
I-Cyanide*																		6	18%	1	
Mercury*																		0	0%	0.07	
Thi*																		13	76%	0.001	
																		1	6%	2**	
ORGANICS (ug/l)																					
Acetone																		0	0%	6000	
Benzene																		11	31%	1	
Carbon Disulfide																		0	0%	700	
Carbon Tetrachloride																		0	0%	0.3	
Chlorobenzene			5.3															8	22%	50	
Chloroethane			28.5		13.6		21.9		12.4		10.5		4		8.2		10	8.9	26	72%	3000
Chloromethane																		1	3%	3	
1,2-Dibromoethane																		0	0%	0.02	
1,4-Dichlorobenzene																		7	19%	6	
cis-1,2-Dichloroethene																		8	22%	70	
1,1-Dichloroethane																		34	94%	6	
1,2-Dichloroethane																		1	3%	0.4	
1,1-Dichloroethene			6		5.4													20	56%	7	
Methylene Chloride																		28	76%	5	
Tetrachloroethylene																		10	28%	0.7	
Toluene																		7	19%	600	
1,1,1-Trichloroethane																		17	47%	200	
Trichloroethylene																		25	69%	3	
Trichlorofluoromethane																		17	47%	2000	
Vinyl Chloride																		10	28%	0.03	
Xylenes			5.6															9	25%	500	
Dichlorodifluoromethane*			20.6		12.6		9.5		7		5.7		5.2		NA		NA	19	83%	1000	
Diethylphthalate*																		1	4%	6000	
bis(2-ethylhexyl)phthalate*																		1	4%	3	
Tetrahydrofuran			NA		NA		NA		NA		NA		NA		NA		1	2	100%	NE	

** 13B GWPS as of Oct 07
 NCGS =
 2L STD of

Groundwater Monitoring Well Data
 Monitoring Well 8 (MW8)
 Downgradient Well - Set 1
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	MW8	Oct. 94	Nov. 94	Jan. 95	Mar. 95	Sep. 95	Dec. 95	Feb. 96	Apr. 96	July 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Apr. 01	Oct. 01	Apr. 02	Oct. 02	Apr. 03
INORGANICS (mg/l)																							
Arsenic																							
Barium	0.043	0.05	0.025	0.032								0.037											
Beryllium																							
Cadmium		0.002	0.001									0.004											
Chromium												0.002											
Cobalt												0.009											
Copper	0.005	0.015	0.09	0.005								0.007											
Lead		0.008				0.011						0.008											
Nickel																							
Selenium																							
Silver																							
Vanadium																							
Zinc	0.02	0.035	0.019	0.009								0.056	0.020		0.040								
t-Cyanide*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tin*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ORGANICS (ug/l)																							
Acetone																							
Benzene																							
Carbon Disulfide																							
Carbon Tetrachloride																							
Chlorobenzene																							
Chloroethane						16																	
Chloromethane																							
1,2-Dibromoethane																							
1,4-Dichlorobenzene																							
cis-1,2-Dichloroethene																							
1,1-Dichloroethane																							
1,2-Dichloroethane																							
1,1-Dichloroethene																							
Methylene Chloride																							
Tetrachloroethylene																							
Toluene																							
1,1,1-Trichloroethane																							
Trichloroethylene																							
Trichlorofluoromethane																							
Vinyl Chloride																							
Xylenes																							
Dichlorodifluoromethane*	NA	NA	NA	NA	NA	7	6.8																
Diethylphthalate*	NA	NA	NA	NA	NA																		
Bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA	NA																		
Tetrahydrofuran	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

"NC" - indicates concentrations exceeding NCGS
 - not established
 - not applicable
 -denotes an Appendix II constituent not included in Appendix I

Groundwater Monitoring Well Data
 Monitoring Well 8 (MW8)
 Downgradient Well - Set 1
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 08	Oct. 09	Apr. 10	Oct. 10	Apr. 11	Oct. 11	MW8 Detects detect#	detect%	NCGS
INORGANICS (mg/l)																				
Arsenic																		0	0%	0.001**
Barium																		1	3%	0.01
Beryllium																		11	30%	0.7
Cadmium																		2	5%	0.004**
Chromium																		3	8%	0.002
Cobalt																		4	11%	0.01
Copper																		0	0%	0.001**
Lead																		5	14%	1
Nickel																		4	11%	0.015
Selenium																		1	3%	0.1
Silver																		0	0%	0.02
Vanadium																		0	0%	0.02
Zinc																		3	8%	0.0003**
t-Cyanide*																		8	22%	1
Mercury*																		1	6%	0.07
Tin*																		5	26%	0.001
																		0	0%	2**
ORGANICS (ug/l)																				
Acetone																		0	0%	6000
Benzene																		11	29%	1
Carbon Disulfide																		0	0%	700
Carbon Tetrachloride																		0	0%	0.3
Chlorobenzene																		0	0%	50
Chloroethane																		14	37%	3000
Chloroethane																		3	8%	3
1,2-Dibromoethane																		0	0%	0.02
1,4-Dichlorobenzene																		9	24%	6
cis-1,2-Dichloroethane																		10	26%	70
1,1-Dichloroethane																		31	82%	6
1,2-Dichloroethane																		0	0%	0.4
1,1-Dichloroethane																		1	3%	7
Methylene Chloride																		28	74%	5
Tetrachloroethylene																		11	29%	0.7
Toluene																		0	0%	600
1,1,1-Trichloroethane																		0	0%	200
Trichloroethylene																		14	37%	3
Trichloroaurmethane																		0	0%	2000
Vinyl Chloride																		7	18%	0.03
Xylenes																		1	3%	500
Dichlorodifluoromethane*																		4	17%	1000
Diethylphthalate*																		0	0%	6000
bis(2-ethylhexyl)phthalate*																		0	0%	3
Tetrahydrofuran																		1	50%	NE

NCGS =
 2L STD of
 ** 13B GWPS as of Oct 07

Groundwater Monitoring Well Data
 Monitoring Well 9 (MW9)
 Downgradient Well - Set 1
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	MW9																			
	Apr. 01	Oct. 01	Apr. 02	Oct. 02	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10	
INORGANICS (mg/l)																				
Antimony																				
Arsenic																				
Barium																				
Beryllium																				
Cadmium																				
Chromium																				
Cobalt																				
Copper																				
Lead																				
Nickel																				
Selenium																				
Silver																				
Vanadium																				
Zinc																				
t-Cyanide*	NA	NA	NA	NA	NA	NA	NA	NA	NA											
Mercury*	NA	NA	NA	NA	NA	NA	0.00075	NA	NA											
Tin*	NA	NA	NA	NA	NA	NA	NA	NA	NA											
ORGANICS (ug/l)																				
Acetone																				
Benzene	5.6	11	7.5	6.5	6.1	6.4														
Carbon Disulfide																				
Carbon Tetrachloride																				
Chlorobenzene																				
Chloroethane	65	51	39	35.7	27.4	36	18	16.2	10.3	12.1	18.2	11.7	11.1	11.8	8.1	9.6	11.2	11.7	10.1	
Chloromethane																				
1,2-Dibromoethane																				
1,4-Dichlorobenzene																				
cis-1,2-Dichloroethene																				
1,1-Dichloroethane																				
1,2-Dichloroethane																				
1,1-Dichloroethene																				
Methylene Chloride																				
Tetrachloroethylene																				
Toluene																				
1,1,1-Trichloroethane																				
Trichloroethylene																				
Trichlorofluoromethane																				
Vinyl Chloride																				
Xylenes																				
Dichlorodifluoromethane*	26	39	25	24.5	19.6	15.6	7.3													
Diethylphthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA											
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA											
- indicates concentrations exceeding NCGS																				
"NE" - not established																				
"NA" - not applicable																				
* - denotes an Appendix II constituent not included in Appendix I																				

Groundwater Monitoring Well Data
 Monitoring Well 9 (MW9)
 Downgradient Well - Set 1
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	SAMPLING DATES			MW9 Detects detect# / detect%	NCGS (mg/l)
	Oct. 10	Apr. 11	Oct. 11		
INORGANICS (mg/l)					
Antimony	NA	NA	NA	0	0%
Arsenic	NA	NA	NA	0	0%
Barium	NA	NA	NA	7	37%
Beryllium	NA	NA	NA	0	0%
Cadmium	NA	NA	NA	0	0%
Chromium	NA	NA	NA	4	21%
Cobalt	NA	NA	NA	0	0%
Copper	NA	NA	NA	2	11%
Lead	NA	NA	NA	2	11%
Nickel	NA	NA	NA	0	0%
Selenium	NA	NA	NA	0	0%
Silver	NA	NA	NA	0	0%
Vanadium	NA	NA	NA	3	16%
Zinc	NA	NA	NA	0	0%
t-Cyanide*	NA	NA	NA	0	NA
Mercury*	NA	NA	NA	3	NA
Tin*	NA	NA	NA	0	NA
ORGANICS (ug/l)					
Acetone				0	0%
Benzene	NA	NA	NA	15	79%
Carbon Disulfide	NA	NA	NA	0	0%
Carbon Tetrachloride	NA	NA	NA	0	0%
Chlorobenzene	NA	NA	NA	17	89%
Chloroethane	NA	NA	NA	16	84%
Chloromethane	NA	NA	NA	1	5%
1,2-Dibromoethane	NA	NA	NA	1	5%
1,4-Dichlorobenzene	NA	NA	NA	6	32%
cis-1,2-Dichloroethene	NA	NA	NA	10	53%
1,1-Dichloroethane	NA	NA	NA	16	84%
1,2-Dichloroethane	NA	NA	NA	1	5%
1,1-Dichloroethene	NA	NA	NA	0	0%
Methylene Chloride	NA	NA	NA	17	89%
Tetrachloroethylene	NA	NA	NA	9	47%
Toluene	NA	NA	NA	0	0%
1,1,1-Trichloroethane	NA	NA	NA	0	0%
Trichloroethylene	NA	NA	NA	18	95%
Trichlorofluoromethane	NA	NA	NA	0	0%
Vinyl Chloride	NA	NA	NA	7	37%
Xylenes	NA	NA	NA	10	53%
Dichlorodifluoromethane*	NA	NA	NA	0	NA
Diethylphthalate*	NA	NA	NA	0	NA
bis(2-ethylhexyl)phthalate*	NA	NA	NA	0	NA
					NCGS =
					2L STD or
					** 13B GWFS as of Oct. 07

Groundwater Monitoring Well Data
 Monitoring Well 10 (MW10)
 Downgradient Well - Set 1
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	MW10	SAMPLING DATES																		
		Apr. 01	Oct. 01	Apr. 02	Oct. 02	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10
INORGANICS (mg/l)																				
Antimony																				
Arsenic																				
Barium																				
Beryllium																				
Cadmium																				
Chromium																				
Cobalt																				
Copper																				
Lead																				
Nickel																				
Selenium																				
Silver																				
Vanadium																				
Zinc																				
I-Cyanide*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.00029	NA	NA
Tin*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ORGANICS (ug/l)																				
Acetone																				
Benzene																				
Carbon Disulfide																				
Carbon Tetrachloride																				
Chlorobenzene	25	33	21	9.2	6.8	5.7	6.7													
Chloroethane	72	47	51	16.7	11.6	18.8	19.8	12.2												
Chloromethane																				
1,2-Dibromoethane																				
1,4-Dichlorobenzene																				
cis-1,2-Dichloroethene																				
1,1-Dichloroethane	17	17	20	6.9	6.8	11.7	12.6	10.7	6.5	15.8	7.9	7.9	16.9	6.9	9	13	1.4	3	3.8	5.4
1,2-Dichloroethane																				
1,1-Dichloroethene																				
Methylene Chloride	120	310	132	59.9	19.7	45	67	316	27.1											
Tetrachloroethylene	12	41	14	6.6	7.1	7.3														
Toluene																				
1,1,1-Trichloroethane																				
Trichloroethylene																				
Trichlorofluoromethane																				
Vinyl Chloride																				
Xylenes	35	39	30	7.4	5	6.4	12.3	5.5	5.3											
Dichlorodifluoromethane*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethylphthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
- indicates concentrations exceeding NCGS																				
*NE - not established																				
**NA - not applicable																				
* - denotes an Appendix II constituent not included in Appendix I																				

Groundwater Monitoring Well Data
 Monitoring Well 10 (MW10)
 Downgradient Well - Set 1
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	SAMPLING DATES			MW10 Detects detect#	detect%	NCGS (mg/l)
	Oct. 10	Apr. 11	Oct. 11			
INORGANICS (mg/l)						
Antimony			NA	0	0%	0.001**
Arsenic			NA	1	5%	0.01
Barium	0.117		NA	1	5%	0.7
Beryllium			NA	0	0%	0.004**
Cadmium			NA	0	0%	0.002
Chromium			NA	4	19%	0.01
Cobalt			NA	0	0%	0.001**
Copper	0.015		NA	5	24%	1
Lead			NA	1	5%	0.015
Nickel			NA	0	0%	0.1
Selenium			NA	0	0%	0.02
Silver			NA	0	0%	0.02
Vanadium			NA	1	5%	0.0003**
Zinc			NA	4	19%	1
t-Cyanide*		NA	NA	0	NA	0.07
Mercury*	0.00031	NA	NA	2	NA	0.001
Tin*		NA	NA	0	NA	2**
ORGANICS (ug/l)						
Acetone			NA	5	24%	6000
Benzene	1.2		NA	11	52%	1
Carbon Disulfide			NA	0	0%	700
Carbon Tetrachloride			NA	0	0%	0.3
Chlorobenzene			NA	11	52%	50
Chloroethane			NA	9	43%	3000
Chloromethane			NA	0	0%	3
1,2-Dibromoethane			NA	0	0%	0.02
1,4-Dichlorobenzene	2.2		NA	7	33%	6
cis-1,2-Dichloroethene	7.1		NA	19	90%	70
1,1-Dichloroethane			NA	18	86%	6
1,2-Dichloroethane			NA	0	0%	0.4
1,1-Dichloroethene			NA	0	0%	7
Methylene Chloride			NA	15	71%	5
Tetrachloroethylene			NA	7	33%	0.7
Toluene			NA	3	14%	600
1,1,1-Trichloroethane			NA	0	0%	200
Trichloroethylene			NA	7	33%	3
Trichlorofluoromethane			NA	0	0%	2000
Vinyl Chloride			NA	8	38%	0.03
Xylenes			NA	9	43%	500
Dichlorodifluoromethane*		NA	NA	0	NA	1000
Diethylphthalate*		NA	NA	0	NA	6000
bis(2-ethylhexyl)phthalate*		NA	NA	0	NA	3
						NCGS =
						2L STD or
						** 13B GWPS as of Oct 07

Groundwater Monitoring Well Data
 Monitoring Well 11 (MW11)
 Downgradient Well - Set 1 (Subset 1N)
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	MW11										MW11 Detects detect# detect%	NCGS	
	May 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10	Oct. 10	Apr. 11	Oct. 11				
INORGANICS (mg/l)													
Antimony												0	0% 0.001**
Arsenic												0	0% 0.01
Barium												0	0% 0.7
Beryllium												0	0% 0.004**
Cadmium												1	10% 0.002
Chromium												0	0% 0.01
Cobalt												0	0% 0.001**
Copper												0	0% 1
Lead												0	0% 0.015
Nickel												0	0% 0.1
Selenium												0	0% 0.02
Silver												0	0% 0.02
Vanadium												0	0% 0.0003**
Zinc												0	0% 1
t-Cyanide*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	NA 0.07
Mercury*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	NA 0.001
Tin*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	NA 2**
ORGANICS (ug/l)													
Acetone												0	0% 6000
Benzene												0	0% 1
Carbon Disulfide												0	0% 700
Carbon Tetrachloride												0	0% 0.3
Chlorobenzene												0	0% 50
Chloroethane												0	0% 3000
Chloromethane												0	0% 3
1,2-Dibromoethane												0	0% 0.02
1,4-Dichlorobenzene												0	0% 6
cis-1,2-Dichloroethene												0	0% 70
1,1-Dichloroethane												0	0% 6
1,2-Dichloroethane												0	0% 0.4
1,1-Dichloroethene												0	0% 7
Methylene Chloride												0	0% 5
Tetrachloroethylene												0	0% 0.7
Toluene												0	0% 600
1,1,1-Trichloroethane												0	0% 200
Trichloroethylene												0	0% 3
Trichlorofluoromethane												0	0% 2000
Vinyl Chloride												0	0% 0.03
Xylenes												0	0% 500
Dichlorodifluoromethane*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	NA 1000
Diethylphthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	NA 6000
bis(2-ethylhexyl)phthalate*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	NA 3
- indicates concentrations exceeding NCGS													
- not established													
- not applicable													
-denotes an Appendix II constituent not included in Appendix I													
												NCGS =	
												2L STD of	
												** 13B GWPS as of Oct 07	

Groundwater Monitoring Well Data
 Monitoring Well 12 (MW12)
 Downgradient Well - Set 1 (Subset 1N)
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	MW12										MW12 Detects detect# detect%	NCGS (mg/l)	
	May 07	Oct 07	Apr 08	Oct 08	Apr 09	Oct 09	Apr 10	Oct 10	Apr 11	Oct 11			
INORGANICS (mg/l)													
Antimony												0	0% 0.001**
Arsenic												0	0% 0.01
Barium												0	0% 0.7
Beryllium	0.001	0.0019	0.0015	0.002	0.0035	0.0022	0.0012	0.001	0.001	0.003		10	100% 0.004**
Cadmium												0	0% 0.002
Chromium												0	0% 0.01
Cobalt												0	0% 0.001**
Copper												0	0% 1
Lead												0	0% 0.015
Nickel												0	0% 0.1
Selenium												0	0% 0.02
Silver												0	0% 0.02
Vanadium												0	0% 0.0003**
Zinc	0.013	0.017	0.012	0.015	0.015	0.013					5	50% 1	
t-Cyanide*	NA	0	NA 0.07										
Mercury*	NA	0	NA 0.001										
Tin*	NA	0	NA 2**										
ORGANICS (ug/l)													
Acetone												0	0% 700
Benzene												0	0% 1
Carbon Disulfide												0	0% 6000
Carbon Tetrachloride												0	0% 0.3
Chlorobenzene												0	0% 50
Chloroethane												0	0% 3000
Chloromethane												0	0% 3
1,2-Dibromoethane												0	0% 0.02
1,4-Dichlorobenzene												0	0% 6
cis-1,2-Dichloroethane												0	0% 70
1,1-Dichloroethane												0	0% 6
1,2-Dichloroethane												0	0% 0.4
1,1-Dichloroethene												0	0% 7
Methylene Chloride												0	0% 5
Tetrachloroethylene												0	0% 0.7
Toluene												0	0% 600
1,1,1-Trichloroethane												0	0% 200
Trichloroethylene												0	0% 3
Trichlorofluoromethane												0	0% 2000
Vinyl Chloride												0	0% 0.03
Xylenes												0	0% 500
Dichlorodifluoromethane*	NA	0	NA 1000										
Diethylthiathalate*	NA	0	NA 6000										
bis(2-ethylhexyl)phthalate*	NA	0	NA 3										
* - Indicates concentrations exceeding NCGS													
** - not established													
*** - not applicable													
- denotes an Appendix II constituent not included in Appendix I													
											NCGS =	2L STD of	
											** 13B GWPS as of Oct 07		

Groundwater Monitoring Well Data
 Monitoring Well 15 (MW15)
 Downgradient Well - Set 1
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	MW15		MW15 Detects							NCGS				
	SAMPLING DATES	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10	Oct. 10		Apr. 11	Oct. 11	detect#	detect%
INORGANICS (mg/l)														
Antimony			NA									0	0%	0.001**
Arsenic			NA									0	0%	0.01
Barium			NA									1	13%	0.7
Beryllium			NA					0.116				1	13%	0.004**
Cadmium			NA					0.001				0	0%	0.002
Chromium			NA									0	0%	0.01
Cobalt			NA									0	0%	0.001**
Copper			NA									0	0%	1
Lead			NA									0	0%	0.015
Nickel			NA									0	0%	0.1
Selenium			NA									0	0%	0.02
Silver			NA									0	0%	0.02
Vanadium			NA									0	0%	0.003**
Zinc			NA									0	0%	1
t-Cyanide*		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	NA	0.07
Mercury*		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	NA	0.001
Tin*		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	NA	2**
ORGANICS (ug/l)														
Acetone			NA									1	13%	6000
Benzene			NA					144				0	0%	1
Carbon Disulfide			NA									0	0%	700
Carbon Tetrachloride			NA									0	0%	0.3
Chlorobenzene			NA									0	0%	50
Chloroethane			NA									0	0%	3000
Chloromethane			NA									0	0%	3
1,2-Dibromoethane			NA									0	0%	0.02
1,4-Dichlorobenzene			NA									0	0%	6
cis-1,2-Dichloroethene			NA									0	0%	70
1,1-Dichloroethane			NA									0	0%	6
1,2-Dichloroethane			NA									0	0%	0.4
1,1-Dichloroethene			NA									0	0%	7
Methylene Chloride			NA									0	0%	5
Tetrachloroethylene			NA									0	0%	0.7
Toluene			NA	4.5	149	11.6	2.6	28.6				5	63%	600
1,1,1-Trichloroethane			NA									0	0%	200
Trichloroethylene			NA									0	0%	3
Trichlorofluoromethane			NA									0	0%	2000
Vinyl Chloride			NA									0	0%	0.03
Xylenes			NA									0	0%	500
Dichlorodifluoromethane*		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	NA	1000
Diethylphthalate*		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	NA	6000
bis(2-ethylhexyl)phthalate*		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	NA	3
			- indicates concentrations exceeding NCGS											
		"NE"												NCGS =
		"NA"												2L STD or
		*												** 13B GWPS as of Oct 07

Groundwater Monitoring Well Data
 Monitoring Well 23B (MW23B)
 Downgradient Well - Set 1
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	MW23B	Oct. 94	Nov. 94	Jan. 95	Mar. 95	Sep. 95	Dec. 95	Feb. 96	Mar. 96	July 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Apr. 01	Oct. 01	Apr. 02	Oct. 02	Apr. 03	
INORGANICS (mg/l)																								
Arsenic																								
Barium				0.109	0.228	0.019	0.076																	
Beryllium		0.071	0.17	0.002	0.02	0.019																		
Cadmium		0.0008	0.001																					
Chromium		0.008																						
Cobalt						0.01																		
Copper		0.015	0.034	0.02	0.037																			
Lead		0.005	0.015	0.006																				
Nickel																								
Selenium																								
Silver																								
Vanadium		0.013	0.05	0.006	0.04																			
Zinc		0.043	0.035	0.021	0.047	0.06																		
i-Cyanide*		NA	NA																					
Mercury*		NA	NA																					
Tin*		NA	NA																					
ORGANICS (ug/l)																								
Acetone																								
Benzene																								
Carbon Disulfide																								
Carbon Tetrachloride																								
Chlorobenzene																								
Chloroethane																								
Chloroethane																								
1,2-Dibromoethane																								
1,4-Dichlorobenzene																								
cis-1,2-Dichloroethene																								
1,1-Dichloroethane																								
1,2-Dichloroethane																								
1,1-Dichloroethene																								
Methylene Chloride																								
Tetrachloroethylene																								
Toluene																								
1,1,1-Trichloroethane																								
Trichloroethylene																								
Trichlorofluoromethane																								
Vinyl Chloride																								
Xylenes																								
Dichlorodifluoromethane*		NA	NA																					
Diethylphthalate*		NA	NA																					
bis(2-ethylhexyl)phthalate*		NA	NA																					
MW23B, a Set 2 well, is statistically compared with Set 1 since it is downgradient of Set 1 wells.																								
"NE" - not established																								
"NA" - not applicable																								
*denotes an Appendix II constituent not included in Appendix I																								

Recommended Test Per Constituent
Total Detects and Percentages
Set 1 Data
Dunn-Erwin MSW Landfill
Harnett County, NC

CONSTITUENT	SET 1 DATA		RECOMMENDED TEST
	Detect #	Detect %	
INORGANICS (mg/l)			
Beryllium	134	32%	TEST OF PROPORTIONS*
NOTES:			
* The Test of Proportions may be performed jointly with a qualitative test to ensure more accurate results.			

Test of Proportions
Data Set 1
Dunn-Erwin MSW Landfill
Harnett County, North Carolina

Parameter	Nt	Pdt	Pd	B*(1-C)	n	Pu	m	Pd	Sd	Z	notes
DATA SET 1											
MW14											
METALS											
Beryllium	84	0.2381	20	64	74	0.2432	10	0.2	0.1435	0.301348	not SSI OBL

NOTES:

Nt = total number of well samples analyzed (upgradient + particular downgradient analyzed) = m + n
 Pdt = total proportion of detects for Nt for parameter analyzed
 m = total number of compliance well samples analyzed = # of sampling events for particular well analyzed
 n = total number of upgradient well samples analyzed = # of sampling events X # of upgradient wells
 Pu = proportion of upgradient detects for parameter analyzed
 Pd = proportion of downgradient detects for parameter and individual well analyzed
 Sd = standard error of the difference in proportions (8-4, Interim Final Guidance Doc.)
 Z = If the absolute value of Z is greater than 1.96, then there is a statistically significant difference between the upgradient well detection for the given parameter and the particular downgradient well analyzed.
 * = Columns headed with B*C and B*(1-C) require values greater than or equal to 5 in order to perform the test of proportions. An asterisk denotes that the constituent did not qualify for the test of proportions for that particular well.
 NA = Not Applicable. There are no detects of the particular constituent in the particular well analyzed.
 Mercury included in sampling only at MW6, MW7, MW8 and MW23B.
 Dichlorodifluoromethane included in sampling only at MW6 - MW10.

Groundwater Monitoring Well Data
 Monitoring Well 53 (MW53)
 Corrective Action Well
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	MW53		MW53 Detects detect# detect%	NCGS
	Oct. 10	Apr. 11 Oct. 11		
INORGANICS (mg/l)				
Arsenic			0 0%	0.001**
Barium		0.109	0 0%	0.01
Beryllium			1 33%	0.7
Cadmium			0 0%	0.004**
Chromium			0 0%	0.002
Cobalt			0 0%	0.01
Copper		0.015	0 0%	0.001**
Lead			1 33%	1
Nickel			0 0%	0.015
Selenium			0 0%	0.1
Silver			0 0%	0.02
Vanadium			0 0%	0.02
Zinc			0 0%	0.0003**
t-Cyanide*	NA	NA	0 0%	1
Mercury*	NA	NA	0 NA	0.07
Tin*	NA	NA	0 NA	0.001
	NA	NA	0 NA	2**
ORGANICS (ug/l)				
Acetone			0 0%	700
Benzene			2 67%	1
Carbon Disulfide			0 0%	700
Carbon Tetrachloride			0 0%	0.3
Chlorobenzene			0 0%	50
Chloroethane			0 0%	3000
Chloromethane			0 0%	3
1,2-Dibromoethane			0 0%	0.02
1,4-Dichlorobenzene	1.3	3.1 2.9	3 100%	6
cis-1,2-Dichloroethane		11 6.5	2 67%	70
1,1-Dichloroethane			3 100%	6
1,2-Dichloroethane			0 0%	0.4
1,1-Dichloroethene			0 0%	7
Methylene Chloride		1.5	3 100%	5
Tetrachloroethylene	1.2	1.1	2 67%	0.7
Toluene			0 0%	600
1,1,1-Trichloroethane			0 0%	200
Trichloroethylene	1.5	1.5 1.1	3 100%	3
Trichlorofluoromethane			0 0%	2000
Vinyl Chloride			3 100%	0.03
Xylenes			0 0%	500
Dichlorodifluoromethane*	NA	NA	0 NA	1000
Diethylthiathalate*	NA	NA	0 NA	6000
bis(2-ethylhexyl)phthalate*	NA	NA	0 NA	3
	"NE"			NCGS =
	"NA"			2L STD or
	*		** 13B GWPS as of Oct.07	

- indicates concentrations exceeding NCGS
 - not established
 - not applicable
 -denotes an Appendix II constituent not included in Appendix I

Groundwater Monitoring Well Data
 Monitoring Well 57 (MW57)
 Corrective Action Well
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	MW57		MW57 Detects detect# detect%	NCGS
	Oct. 10	Apr. 11 Oct. 11		
SAMPLING DATES				
INORGANICS (mg/l)				
Antimony			0	0% 0.001**
Arsenic			0	0% 0.01
Barium	0.105	0.103 0.121	3	100% 0.7
Beryllium		0.002	1	33% 0.004**
Cadmium			0	0% 0.002
Chromium			1	33% 0.01
Cobalt			0	0% 0.001**
Copper			0	0% 1
Lead			1	33% 0.015
Nickel			0	0% 0.1
Selenium			0	0% 0.02
Silver			0	0% 0.02
Vanadium			1	33% 0.0003**
Zinc		0.012	1	33% 1
t-Cyanide*	NA	NA	0	NA 0.07
Mercury*	NA	NA	0	NA 0.001
Tin*	NA	NA	0	NA 2**
ORGANICS (ug/l)				
Acetone			0	0% 700
Benzene			1	33% 1
Carbon Disulfide			0	0% 700
Carbon Tetrachloride			0	0% 0.3
Chlorobenzene			0	0% 50
Chloroethane			0	0% 3000
Chloromethane			0	0% 3
1,2-Dibromoethane			0	0% 0.02
1,4-Dichlorobenzene		1	1	33% 6
cis-1,2-Dichloroethene	9.3	8.3	2	67% 70
1,1-Dichloroethane			0	0% 6
1,2-Dichloroethane			0	0% 0.4
1,1-Dichloroethene			0	0% 7
Methylene Chloride		1.6	1	33% 5
Tetrachloroethylene			0	0% 0.7
Toluene			0	0% 600
1,1,1-Trichloroethane			0	0% 200
Trichloroethylene	1.1	1	2	67% 3
Trichlorofluoromethane			0	0% 2000
Vinyl Chloride			2	67% 0.03
Xylenes			0	0% 500
Dichlorodifluoromethane*	NA	NA	0	NA 1000
Diethylphthalate*	NA	NA	0	NA 6000
bis(2-ethylhexyl)phthalate*	NA	NA	0	NA 3
* - indicates concentrations exceeding NCGS				
"NE" - not established				
"NA" - not applicable				
* - denotes an Appendix II constituent not included in Appendix I				
				NCGS = 2L STD or ** 13B GWPS as of Oct 07

Groundwater Monitoring Well Data
 Monitoring Well 58 (MW58)
 Corrective Action Well
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	MW58		MW58 Detects detect# detect%	NCGS
	Oct. 10	Apr. 11 Oct. 11		
INORGANICS (mg/l)				
Antimony			0 0%	0.001**
Arsenic			0 0%	0.01
Barium			0 0%	0.7
Beryllium			0 0%	0.004**
Cadmium			0 0%	0.002
Chromium			1 33%	0.01
Cobalt			0 0%	0.001**
Copper			0 0%	1
Lead		0.014	1 33%	0.015
Nickel			0 0%	0.1
Selenium			0 0%	0.02
Silver			0 0%	0.02
Vanadium			0 0%	0.0003**
Zinc			0 0%	1
t-Cyanide*	NA	NA	0 NA	0.07
Mercury*	NA	NA	0 NA	0.001
Tin*	NA	NA	0 NA	2**
ORGANICS (ug/l)				
Acetone			0 0%	700
Benzene			0 0%	1
Carbon Disulfide			0 0%	700
Carbon Tetrachloride			0 0%	0.3
Chlorobenzene			0 0%	50
Chloroethane			0 0%	3000
Chloromethane			0 0%	3
1,2-Dibromoethane			0 0%	0.02
1,4-Dichlorobenzene			0 0%	6
cis-1,2-Dichloroethene			0 0%	70
1,1-Dichloroethane			0 0%	6
1,2-Dichloroethane			0 0%	0.4
1,1-Dichloroethene			0 0%	7
Methylene Chloride			0 0%	5
Tetrachloroethylene			0 0%	0.7
Toluene			0 0%	600
1,1,1-Trichloroethane			0 0%	200
Trichloroethylene			0 0%	3
Trichlorofluoromethane			0 0%	2000
Vinyl Chloride			0 0%	0.03
Xylenes			0 0%	500
Dichlorodifluoromethane*	NA	NA	0 NA	1000
Diethylthaiate*	NA	NA	0 NA	6000
bis(2-ethylhexyl)phthalate*	NA	NA	0 NA	3
- indicates concentrations exceeding NCGS				
NE - not established				
NA - not applicable				
* - denotes an Appendix II constituent not included in Appendix I				
** 13B GWPS as of Oct 07				

Groundwater Monitoring Well Data
 Monitoring Well 59 (MW59)
 Corrective Action Well
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	MW59		MW59 Detects detect# / detect%	NCGS (mg/l) 0.001** 0.01 0.7 0.004** 0.002 0.01 0.001** 1 0.015 0.1 0.02 0.02 0.0003** 1
	Oct. 10	Apr. 11		
SAMPLING DATES				
INORGANICS (mg/l)				
Antimony				
Arsenic				
Barium	0.104			
Beryllium		0.001	0.002	
Cadmium				
Chromium				
Cobalt				
Copper	0.01	0.012	0.034	
Lead				
Nickel				
Selenium				
Silver				
Vanadium				
Zinc	0.015		0.014	
i-Cyanide*	NA	NA	NA	
Mercury*	NA	NA	NA	
Tin*	NA	NA	NA	
ORGANICS (ug/l)				
Acetone				
Benzene	1	1	1	
Carbon Disulfide				
Carbon Tetrachloride				
Chlorobenzene				
Chloroethane				
Chloromethane				
1,2-Dibromoethane				
1,4-Dichlorobenzene				
cis-1,2-Dichloroethene				
1,1-Dichloroethane				
1,2-Dichloroethane				
1,1-Dichloroethene				
Methylene Chloride				
Tetrachloroethylene				
Toluene				
1,1,1-Trichloroethane				
Trichloroethylene				
Trichlorofluoromethane				
Vinyl Chloride				
Xylenes				
Dichlorodifluoromethane*	NA	NA	NA	
Diethylphthalate*	NA	NA	NA	
bis(2-ethylhexyl)phthalate*	NA	NA	NA	
	"NE"			
	"NA"			
	*			
* Indicates concentrations exceeding NCGS - not established - not applicable -denotes an Appendix II constituent not included in Appendix I				
				NCGS = 2L STD of ** 13B GWPS as of Oct 07

APPENDIX B

DATA SET 2

Groundwater Monitoring Well Data
Monitoring Well 16 (MW16)
Upgradient Well - Set2
Dunn-Erwin Landfill
Harnett County, North Carolina

CONSTITUENT	MW16	Oct. 94	Nov. 94	Jan. 95	Mar. 95	Sep. 95	Dec. 95	Feb. 96	Apr. 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Oct. 00	Apr. 01	
SAMPLE DATE																				
INORGANICS (mg/l)																				
Antimony							NA													
Arsenic							NA													
Barium				0.114	0.147		NA	NA	NA	0.104	0.099	0.1	0.162	0.06	0.281	0.162	0.06	NA	NA	
Beryllium	0.112	0.194					NA													
Cadmium	0.0018	0.001				0.002	NA	NA	NA	0.006	0.006	0.008	0.005	0.002	0.001	0.005	0.002	0.002	0.002	
Chromium	0.004	0.007				0.01	NA	NA	NA	0.012	0.012	0.012	0.012	0.005	0.005	0.011	0.002	0.002	0.002	
Cobalt							NA													
Copper	0.008	0.009	0.018	0.014	0.014		NA													
Lead	0.002	0.003				0.013	NA	NA	NA	0.002	0.002	0.002	0.002	0.005	0.005	0.011	0.002	0.002	0.002	
Mercury							NA													
Nickel							NA													
Selenium							NA													
Silver							NA													
Vanadium							NA													
Zinc	0.012	0.014	0.015	0.027	0.027		NA	NA	NA	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070	
ORGANICS (ug/l)																				
cis-1,2-dichloroethene							NA													
methylene chloride							NA													
mek; 2-butanone							NA													
NOTES																				
	"NE"	- indicates concentrations exceeding NCGS																		
	"NT"	- not established																		
	"NA"	- not tested																		
	"NA"	- not applicable																		
	"NA"	-denotes an Appendix II constituent not included in Appendix I																		

Groundwater Monitoring Well Data
 Monitoring Well 16 (MW16)
 Upgradient Well - Set2
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	Oct. 01	Apr. 02	Oct. 02	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09
SAMPLE DATE	NA	NA	NA	NA	NA	NA	NA										
INORGANICS (mg/l)																	
Antimony	NA	NA	NA	NA	NA	NA	NA										
Arsenic																	
Barium																	
Beryllium	NA	NA	NA	NA	NA	NA	NA										
Cadmium																	
Chromium																	
Cobalt	NA	NA	NA	NA	NA	NA	NA										
Copper	NA	NA	NA	NA	NA	NA	NA										
Lead																	
Mercury																	
Nickel	NA	NA	NA	NA	NA	NA	NA										
Selenium																	
Silver																	
Vanadium	NA	NA	NA	NA	NA	NA	NA										
Zinc	NA	NA	NA	NA	NA	NA	NA										
ORGANICS (ug/l)																	
cis-1,2-dichloroethene																	
methylene chloride																	
mek; 2-butanone																	
NOTES																	

Groundwater Monitoring Well Data
 Monitoring Well 32 (MW32)
 Downgradient Well - Set2
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	MW32	Oct. 94	Nov. 94	Jan. 95	Mar. 95	Sep. 95	Dec. 95	Feb. 96	Apr. 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Oct. 00	Apr. 01	Oct. 01
SAMPLE DATE																				
INORGANICS (mg/l)																				
Antimony		0.004					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic		0.007			0.007		NA	NA	NA	NA	NA	NA	0.043	0.249	0.006	0.005	0.067	0.067	NA	NA
Barium	0.097	0.646	0.145	0.251	0.004		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium							NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	0.0013	0.004					NA	NA	NA	NA	NA	NA	NA	NA	0.001	0.001	NA	NA	NA	NA
Chromium	0.004	0.133	0.016	0.022			NA	NA	NA	NA	NA	NA	NA	NA	0.001	0.001	NA	NA	NA	NA
Cobalt		0.009	0.013	0.009			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	0.006	0.094	0.017	0.026			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	0.002	0.005	0.01	0.002			NA	NA	NA	0.004	0.002	0.002	0.012	0.012	0.004	0.004	NA	NA	NA	NA
Mercury							NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel		0.05					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium		0.002					NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver							NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium		0.003	0.003	0.002	0.002		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	0.008	0.189	0.029	0.051			NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ORGANICS (ug/l)							NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-dichloroethene							NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
methylene chloride							NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
mek, 2-butanone							NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NOTES			471																	
"NE"							- indicates concentrations exceeding NCGS													
"NT"							- not established													
"NA"							- not tested													
*							- not applicable													
							-denotes an Appendix II constituent not included in Appendix I													

Groundwater Monitoring Well Data
 Monitoring Well 32 (MW32)
 Downgradient Well - Set2
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	Apr. 02	Oct. 02	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10
SAMPLE DATE	NA	NA	NA	NA	NA	NA	NA	NA									
INORGANICS (mg/l)																	
Antimony	NA	NA	NA	NA	NA	NA	NA	NA									
Arsenic																	
Barium																	
Beryllium	NA	NA	NA	0.105	NA	NA	0.11	NA									
Cadmium													0.001	NA	NA	NA	NA
Chromium																	
Cobalt	NA	NA	NA	NA	NA	NA	NA	NA									
Copper	NA	NA	NA	NA	NA	NA	NA	NA									
Lead																	
Mercury																	
Nickel	NA	NA	NA	NA	NA	NA	NA	NA									
Selenium																	
Silver																	
Vanadium	NA	NA	NA	NA	NA	NA	NA	NA									
Zinc	NA	NA	NA	NA	NA	NA	NA	NA									
ORGANICS (ug/l)																	
cis-1,2-dichloroethene																	
methylene chloride																	
mek, 2-butanone																	
NOTES																	

Groundwater Monitoring Well Data
 Monitoring Well 32 (MW32)
 Downgradient Well - Set2
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	Oct. 10		Apr. 11	Oct. 11	MW32 Detects detect# / detect%	NCGS (mg/l)
	detect#	detect%	detect#	detect%		
SAMPLE DATE						
INORGANICS (mg/l)						
Antimony	NA	NA	NA	NA	1 / 14%	0.0014**
Arsenic					4 / 11%	0.01
Barium		0.36			12 / 32%	0.7
Beryllium	NA	NA	NA	NA	1 / 14%	0.004**
Cadmium		0.001			7 / 19%	0.002
Chromium		0.014			9 / 24%	0.01
Cobalt	NA	NA	NA	NA	3 / 43%	0.001**
Copper	NA	NA	NA	NA	4 / 57%	1
Lead		0.008			17 / 46%	0.015
Mercury					0 / 0%	0.001
Nickel	NA	NA	NA	NA	1 / 14%	0.1
Selenium					1 / 3%	0.02
Silver					0 / 0%	0.02
Vanadium	NA	NA	NA	NA	4 / 57%	0.0003**
Zinc	NA	NA	NA	NA	4 / 57%	1
ORGANICS (ug/l)						(ug/l)
cis-1,2-dichloroethene					0 / 0%	70
methylene chloride					0 / 0%	5
mek, 2-butanone					1 / 3%	4000
NOTES						
						NCGS =
					** 13B GWPS as of Oct 07	2L STD or

Groundwater Monitoring Well Data
 Monitoring Well 33 (MW33)
 Downgradient Well - Set2
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	Apr. 02	Oct. 02	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10
SAMPLE DATE	Apr. 02	Oct. 02	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10
INORGANICS (mg/l)																	
Antimony	NA	NA	NA	NA	NA	NA	NA	NA									
Arsenic																	
Barium																	
Beryllium	NA	NA	NA	NA	NA	NA	NA	NA									
Cadmium																	
Chromium																	
Cobalt	NA	NA	NA	NA	NA	NA	NA	NA									
Copper	NA	NA	NA	NA	NA	NA	NA	NA									
Lead																	
Mercury																	
Nickel	NA	NA	NA	NA	NA	NA	NA	NA									
Selenium																	
Silver																	
Vanadium	NA	NA	NA	NA	NA	NA	NA	NA									
Zinc	NA	NA	NA	NA	NA	NA	NA	NA									
ORGANICS (ug/l)																	
cis-1,2-dichloroethene																	
methylene chloride																	
mek; 2-butanone																	
NOTES																	

Groundwater Monitoring Well Data
 Monitoring Well 33 (MW33)
 Downgradient Well - Set2
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	Oct. 10		Apr. 11		Oct. 11		MW33 Detects		NCGS	
	INORGANICS (mg/l)						detect#	detect%		(mg/l)
Antimony	NA	NA	NA	NA	0	0%	0	0%	0.0014**	
Arsenic					0	0%	0	0%	0.01	
Barium					10	27%	10	27%	0.7	
Beryllium	NA	NA	NA	NA	3	43%	3	43%	0.004**	
Cadmium					3	8%	3	8%	0.002	
Chromium					6	16%	6	16%	0.01	
Cobalt	NA	NA	NA	NA	2	29%	2	29%	0.001**	
Copper	NA	NA	NA	NA	4	57%	4	57%	1	
Lead					8	22%	8	22%	0.015	
Mercury					2	5%	2	5%	0.001	
Nickel	NA	NA	NA	NA	0	0%	0	0%	0.1	
Selenium					0	0%	0	0%	0.02	
Silver					0	0%	0	0%	0.02	
Vanadium	NA	NA	NA	NA	3	43%	3	43%	0.0003**	
Zinc	NA	NA	NA	NA	4	57%	4	57%	1	
ORGANICS (ug/l)									(ug/l)	
cis-1,2-dichloroethene					3	8%	3	8%	70	
methylene chloride					0	0%	0	0%	5	
mek; 2-butanone					0	0%	0	0%	4000	
NOTES										
									NCGS =	
									2L STD or	
							** 13B	GWPS as of Oct 07		

Groundwater Monitoring Well Data
 Monitoring Well 34 (MW34)
 Downgradient Well - Set2
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	MW34																		
	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 98	Oct. 99	Apr. 00	Oct. 00	Apr. 01	Oct. 01	Apr. 02	Oct. 02	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	
INORGANICS (mg/l)																			
Antimony	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic																			
Barium			0.112	0.005	0.201	0.246	0.221	0.062											
Beryllium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium																			
Chromium																			
Cobalt	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead		0.003	0.002																
Mercury					0.0003	0.0003													
Nickel	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium																			
Silver																			
Vanadium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ORGANICS (ug/l)																			
cis-1,2-dichloroethene																			
methylene chloride																			
mek, 2-butanone																			
NOTES	MW34 was installed in June 1996 therefore no data prior to this date are available.																		
	- indicates concentrations exceeding NCGS																		
	"NE" - not established																		
	"NT" - not tested																		
	"NA" - not applicable																		
*	-denotes an Appendix II constituent not included in Appendix I																		

Groundwater Monitoring Well Data
 Monitoring Well 34 (MW34)
 Downgradient Well - Set2
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	SAMPLE DATE												MW34 Detects detect# / detect%	NCGS (mg/l)			
	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10	Oct. 10	Apr. 11			Oct. 11		
INORGANICS (mg/l)																	
Antimony	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0014**
Arsenic																	0.01
Barium																	0.7
Beryllium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.004**
Cadmium																	0.002
Chromium																	0.01
Cobalt	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.001**
Copper	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1
Lead																	0.015
Mercury																	0.001
Nickel	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.1
Selenium																	0.02
Silver																	0.02
Vanadium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0003**
Zinc	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1
ORGANICS (ug/l)																	
cis-1,2-dichloroethene																	70
methylene chloride																	5
mek; 2-butanone																	4000
NOTES	MW34 was installed in Ju																
	"NE"																
	"NT"																
	"NA"																
	*																
	NCGS =																
	2L STD or																
	** 13B GWPS as of Oct 07																

Groundwater Monitoring Well Data
 Monitoring Well 35 (MW35)
 Downgradient Well - Set2
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09	Apr. 10	Oct. 10	Apr. 11	Oct. 11	MW35 Detects detect#	Detects detect%	NCGS (mg/l)	
SAMPLE DATE																	
INORGANICS (mg/l)																	
Antimony	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0014**	
Arsenic														5	16%	0.01	
Barium				0.132	0.318	0.225	0.25	0.179	0.29	0.179	0.405	0.423	0.535	7	55%	0.7	
Beryllium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.004**	
Cadmium														3	10%	0.002	
Chromium														5	26%	0.01	
Cobalt	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.001**	
Copper	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	
Lead														7	37%	0.015	
Mercury														3	16%	0.001	
Nickel	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.1	
Selenium														1	3%	0.02	
Silver														0	0%	0.02	
Vanadium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0003**	
Zinc	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	
ORGANICS (ug/l)																	
cis-1,2-dichloroethene																	(ug/l)
methylene chloride														0	0%	70	
mek; 2-butanone														0	0%	5	
NOTES														0	0%	4000	
MW35 was installed in Ju																	
"NE"																	NCGS =
"NT"																	2L STD or
"NA"																	** 13B GWPS as of Oct 07

APPENDIX C

DATA SET 3

Groundwater Monitoring Point Data
 Surface Water Monitoring Point 1 (SWPT1)
 Upgradient Point - Set 3
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	SWPT1																		
	Oct. 94	Nov. 94	Jan. 95	Mar. 95	Sep. 95	Dec. 95	Feb. 96	Mar. 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Apr. 01	Oct. 01	
INORGANICS (mg/l)																			
Antimony						NA													
Arsenic	0.007					NA													
Barium	0.045	0.033	0.03	0.029		NA													
Beryllium						NA													
Cadmium					0.001	NA													
Chromium	0.002					NA													
Cobalt						NA													
Copper	0.006			0.006		NA													
Lead						NA													
Nickel						NA													
Selenium						NA													
Silver						NA													
Vanadium						NA													
Zinc	0.011	0.016	0.021	0.013		NA				0.022			0.04						
ORGANICS (ug/l)																			
Benzene						NA													
Chloromethane						NA													
cis-1,2 Dichloroethene						NA													
Ethylbenzene						NA													
Toluene						NA													
Vinyl chloride						NA													
Xylenes						NA													
NOTES																			
	"NE"	- indicates concentrations exceeding NCGS																	
	"NT"	- not established																	
	"NA"	- not tested																	
	*	- not applicable																	
		-denotes an Appendix II constituent not included in Appendix I																	

Groundwater Monitoring Point Data
 Surface Water Monitoring Point 1 (SWPT1)
 Upgradient Point - Set 3
 Dunn-Erwin Landfill
 Hammett County, North Carolina

CONSTITUENT	Apr. 02	Oct. 02	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Apr. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09
INORGANICS (mg/l)																
Antimony								NA								
Arsenic								NA					0.047	0.051	0.051	0.041
Barium								NA					0.183	0.222		
Beryllium								NA								
Cadmium				0.001				NA								
Chromium								NA								
Cobalt								NA					0.011	0.017		
Copper								NA					0.001	0.037		
Lead								NA					0.01	0.015		
Nickel								NA								
Selenium								NA								
Silver								NA								
Vanadium								NA								
Zinc								NA			0.011		0.04	0.033	0.073	
ORGANICS (ug/l)																
Benzene								NA								
Chloromethane								NA					1.3			
cis-1,2 Dichloroethene								NA								
Ethylbenzene								NA								
Toluene								NA								
Vinyl chloride								NA								
Xylenes								NA								
NOTES																

Groundwater Monitoring Point Data
 Surface Water Monitoring Point 1 (SWPT1)
 Upgradient Point - Set 3
 Dunn-Erwin Landfill
 Hammett County, North Carolina

CONSTITUENT	Apr. 10		Oct. 10		Apr. 11		Oct. 11		SWPT1 Detects detect# detect%	NCGS	
	DATE		DATE		DATE		DATE				
INORGANICS (mg/l)											
Antimony							NA		0	0%	(mg/l) 0.001**
Arsenic							NA		5	15%	0.01
Barium							NA		6	18%	0.7
Beryllium							NA		0	0%	0.004**
Cadmium			0.001				NA		3	9%	0.002
Chromium							NA		2	6%	0.01
Cobalt							NA		3	9%	0.001**
Copper							NA		3	9%	1
Lead							NA		2	6%	0.015
Nickel							NA		0	0%	0.1
Selenium							NA		0	0%	0.02
Silver							NA		0	0%	0.02
Vanadium							NA		2	6%	0.0003**
Zinc			0.016				NA		11	32%	1
ORGANICS (ug/l)											
Benzene							NA		0	0%	(ug/l) 1
Chloromethane							NA		1	3%	3
cis-1,2 Dichloroethene							NA		0	0%	70
Ethylbenzene							NA		0	0%	600
Toluene							NA		1	3%	600
Vinyl chloride							NA		0	0%	0.03
Xylenes							NA		0	0%	500
NOTES											
											NCGS =
											2L STD of
											** 13B GWPS

Groundwater Monitoring Point Data
 Surface Water Monitoring Point 2 (SWPT2)
 Set 3 - Downgradient Point
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	SWPT2																	
	Oct. 94	Nov. 94	Jan. 95	Mar. 95	Sep. 95	Dec. 95	Feb. 96	Mar. 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Oct. 01	
INORGANICS (mg/l)																		
Antimony						NA	NA											
Arsenic		0.005				NA	NA											
Barium	0.032	0.027	0.025	0.028		NA	NA				0.01							
Beryllium						NA	NA											
Cadmium		0.001				NA	NA											
Chromium						NA	NA											
Cobalt				0.002		NA	NA											
Copper	0.005		0.006	0.005		NA	NA											
Lead			0.002			NA	NA											
Nickel						NA	NA											
Selenium						NA	NA											
Silver						NA	NA											
Vanadium						NA	NA											
Zinc	0.007	0.005	0.01	0.016		NA	NA				0.007							
ORGANICS (ug/l)																		
Benzene						NA	NA											
Chloromethane						NA	NA											
cis-1,2 Dichloroethene						NA	NA											
Ethylbenzene						NA	NA											
Toluene						NA	NA											
Vinyl chloride						NA	NA											
Xylenes						NA	NA											
NOTES																		
	"NE"	- indicates concentrations exceeding NCGS																
	"NT"	- not established																
	"NA"	- not tested																
	"NA"	- not applicable																
	"NA"	-denotes an Appendix II constituent not included in Appendix I																

Groundwater Monitoring Point Data
 Surface Water Monitoring Point 2 (SWPT2)
 Set 3 - Downgradient Point
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	Apr. 02	Oct. 02	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09
INORGANICS (mg/l)																
Antimony												NA				
Arsenic												NA				
Barium												NA				
Beryllium												NA				
Cadmium												NA				
Chromium												NA				
Cobalt												NA				
Copper												NA				
Lead												NA				
Nickel												NA				
Selenium												NA				
Silver												NA				
Vanadium												NA				
Zinc												NA	0.02	0.014	0.01	
ORGANICS (ug/l)																
Benzene												NA				
Chloromethane												NA				
cis-1,2 Dichloroethene												NA				
Ethylbenzene												NA				
Toluene												NA				
Vinyl chloride												NA				
Xylenes												NA				
NOTES																

Groundwater Monitoring Point Data
 Surface Water Monitoring Point 2 (SWPT2)
 Set 3 - Downgradient Point
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	SAMPLE DATE		SWPT2 Detects detect#	detect%	NCGS
	Apr. 10	Oct. 11			
INORGANICS (mg/l)					(mg/l)
Antimony		NA	0	0%	0.001**
Arsenic		NA	2	6%	0.01
Barium		NA	5	14%	0.7
Beryllium		NA	0	0%	0.004**
Cadmium		NA	1	3%	0.002
Chromium		NA	1	3%	0.01
Cobalt		NA	1	3%	0.001**
Copper		NA	3	9%	1
Lead		NA	1	3%	0.015
Nickel		NA	0	0%	0.1
Selenium		NA	0	0%	0.02
Silver		NA	0	0%	0.02
Vanadium		NA	0	0%	0.0003**
Zinc	0.017	0.014	10	29%	1
ORGANICS (ug/l)					(ug/l)
Benzene		NA	0	0%	1
Chloromethane		NA	0	0%	3
cis-1,2 Dichloroethene		NA	0	0%	70
Ethylbenzene		NA	0	0%	600
Toluene	1.4	NA	2	6%	600
Vinyl chloride		NA	0	0%	0.03
Xylenes		NA	0	0%	500
NOTES					
					NCGS =
					2L STD or
				**	13B GWPS

Groundwater Monitoring Point Data
 Surface Water Monitoring Point 3 (SWPT3)
 Set 3 - Downgradient Point
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	SWPT3																		
	Oct. 94	Nov. 94	Jan. 95	Mar. 95	Sep. 95	Dec. 95	Feb. 96	Mar. 96	Oct. 96	Apr. 97	Oct. 97	Apr. 98	Oct. 98	Mar. 99	Oct. 99	Apr. 00	Apr. 01	Oct. 01	
INORGANICS (mg/l)																			
Antimony						NA	NA												
Arsenic						NA	NA												
Barium	0.035	0.03	0.025	0.029		NA	NA												
Beryllium						NA	NA						0.2		0.036				
Cadmium						NA	NA												
Chromium						NA	NA												
Cobalt						NA	NA												
Copper	0.009	0.005	0.007	0.005		NA	NA												
Lead	0.003					NA	NA												
Nickel						NA	NA												
Selenium						NA	NA												
Silver						NA	NA												
Vanadium						NA	NA												
Zinc	0.013	0.005	0.009	0.01		NA	NA						0.1						
ORGANICS (ug/l)																			
Benzene						NA	NA												
Chloromethane						NA	NA												
cis-1,2 Dichloroethene					11	NA	NA												
Ethylbenzene					14	NA	NA												
Toluene					14	NA	NA												
Vinyl chloride					14	NA	NA												
Xylenes					20	NA	NA												
NOTES																			
	"NE"	- indicates concentrations exceeding NCGS																	
	"NT"	- not established																	
	"NA"	- not tested																	
	*	- not applicable																	
		-denotes an Appendix II constituent not included in Appendix I																	

Groundwater Monitoring Point Data
 Surface Water Monitoring Point 3 (SWPT3)
 Set 3 - Downgradient Point
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	Apr. 02	Oct. 02	Apr. 03	Oct. 03	Apr. 04	Oct. 04	Apr. 05	Oct. 05	Apr. 06	Oct. 06	May 07	Oct. 07	Apr. 08	Oct. 08	Apr. 09	Oct. 09
SAMPLE DATE																
INORGANICS (mg/l)																
Antimony																
Arsenic																
Barium																
Beryllium																
Cadmium																
Chromium																
Cobalt																
Copper																
Lead																
Nickel																
Selenium																
Silver																
Vanadium																
Zinc					0.366								0.016	0.028		
ORGANICS (ug/l)																
Benzene																
Chloromethane																
cis-1,2 Dichloroethene																
Ethylbenzene																
Toluene																
Vinyl chloride																
Xylenes																
NOTES																

Groundwater Monitoring Point Data
 Surface Water Monitoring Point 3 (SWPT3)
 Set 3 - Downgradient Point
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	Apr. 10		Apr. 11		Oct. 11		SWPT3 Detects detect# detect%	NCGS
	DATE		DATE		DATE			
INORGANICS (mg/l)								
Antimony							0	0% (mg/l) 0.001**
Arsenic							2	6% 0.01
Barium					0.124		9	25% 0.7
Beryllium							0	0% 0.004**
Cadmium							2	6% 0.002
Chromium							2	6% 0.01
Cobalt							2	6% 0.001**
Copper							4	11% 1
Lead							2	6% 0.015
Nickel							0	0% 0.1
Selenium							0	0% 0.02
Silver							0	0% 0.02
Vanadium							0	0% 0.0003**
Zinc		0.01	0.01	0.023			12	33% 1
ORGANICS (ug/l)								
Benzene							1	3% (ug/l) 1
Chloromethane							0	0% 3
cis-1,2 Dichloroethene							1	3% 70
Ethylbenzene							1	3% 600
Toluene							3	8% 600
Vinyl chloride							1	3% 0.03
Xylenes							1	3% 500
NOTES								
								NCGS = 2L STD or
								** 13B GWPS

Groundwater Monitoring Point Data
 Surface Water Monitoring Point 4 (SWPT4)
 Set 3 - Downgradient Point
 Dunn-Erwin Landfill
 Harnett County, North Carolina

CONSTITUENT	SWPT4	SWPT3	SWPT3 Detects	NCGS
SAMPLE DATE	Apr. 10	Oct. 10	Apr. 11	Oct. 11
INORGANICS (mg/l)				
Antimony				(mg/l) 0.001**
Arsenic				0.01
Barium				0.7
Beryllium				0.004**
Cadmium				0.002
Chromium				0.01
Cobalt				0.001**
Copper				1
Lead				0.015
Nickel				0.1
Selenium				0.02
Silver				0.02
Vanadium				0.0003**
Zinc		0.012	0.01	1
ORGANICS (ug/l)				
Benzene				(ug/l) 1
Chloromethane				3
cis-1,2 Dichloroethene				70
Ethylbenzene				600
Toluene			17.3	600
Vinyl chloride				0.03
Xylenes				500
NOTES	- indicates concentrations exceeding NCGS "NE" - not established "NT" - not tested "NA" - not applicable * - denotes an Appendix II constituent not included in Appendix I			

SWPT4 not eligible for statistical analysis until background sampling is completed.

APPENDIX D

LABORATORY RESULTS AND CHAIN OF CUSTODY FORMS

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6040 E

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

DATE COLLECTED: 10/27/11
DATE REPORTED : 11/04/11

REVIEWED BY: 

PARAMETERS	MDL	Piezometer	Piezometer	Piezometer	Piezometer	Piezometer	Analysis		Method
		SWSL #418	#448	#44D	#46D	#478	Date	Analyst	Code
Static Water Level, feet		17.36	7.60	10.38	18.72	15.64	10/27/11	RJE	

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6040 E

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

DATE COLLECTED: 10/27/11
DATE REPORTED : 11/04/11

REVIEWED BY: 

PARAMETERS	MDL	Piezometer	Piezometer	Piezometer	Piezometer	Piezometer	Analysis		Method
		SWSL #47D	#488	#50	#51	#52	Date	Analyst	Code
Static Water Level, feet		27.41	14.56	Missing	10.22	20.86	10/27/11	RJH	

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6040 E

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

DATE COLLECTED: 10/27/11
DATE REPORTED : 11/04/11

REVIEWED BY: 

PARAMETERS	MDL	Piezometer					Analysis		Method
		SWSL	#53	#54	#55	#56	#57	Date	
Static Water Level, feet		18.60	15.69	14.38	13.24	12.07	10/27/11	RJH	

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6040 E

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

DATE COLLECTED: 10/27/11
DATE REPORTED: 11/04/11

REVIEWED BY: 

PARAMETERS	MDL	Piezometer		GP-24-W	GP-25-W	GP-27-W	Analysis		Method
		SWSL #58	#59				Date	Analyst Code	
Static Water Level, feet		12.84	13.45	8.77	10.60	18.28	10/27/11	RJH	

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6040 E

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

DATE COLLECTED: 10/27/11
DATE REPORTED : 11/04/11

REVIEWED BY: 

PARAMETERS	MDL	SNGL	GP-28-W	GP-30-W	GP-31-W	GP-33-W	GP-34-W	Analysis	Method
								Date	Analyst
Static Water Level, feet			13.81	17.53	9.83	22.09	19.37	10/27/11	RJH

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6040 E

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

DATE COLLECTED: 10/27/11
DATE REPORTED: 11/04/11

REVIEWED BY: 

PARAMETERS	MDL	SWSL	GP-35-W	GP-36-W	GP-37-W	GP-38-W	Analysis	Method
							Date	Analyst
Static Water Level, feet			5.04	19.14	10.02	15.85	10/27/11	RJH

Environment 1, Incorporated

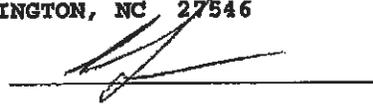
P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0638

CLIENT: HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

CLIENT ID: 6040 E
ANALYST: MAO
DATE COLLECTED: 10/27/11
DATE ANALYZED: 11/01/11
DATE REPORTED: 11/04/11

Page: 1

REVIEWED BY: 

VOLATILE ORGANICS EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Piezometer #41B	GP-25-W	GP-30-W	GP-37-W	GP-38-W							
1. Chloromethane	0.77	1.0	---	U	---	U	---	U						
2. Vinyl Chloride	0.63	1.0	2.90	---	U	1.60	---	U	1.10					
3. Bromomethane	0.67	10.0	---	U	---	U	---	U	---	U				
4. Chloroethane	0.48	10.0	0.70	J	---	U	0.50	J	---	U	0.60	J		
5. Trichlorofluoromethane	0.24	1.0	---	U	---	U	---	U	---	U	---	U		
6. 1,1-Dichloroethene	0.17	5.0	---	U	---	U	---	U	---	U	---	U		
7. Acetone	9.06	100.0	---	U	---	U	---	U	---	U	---	U		
8. Iodomethane	0.26	10.0	---	U	---	U	---	U	---	U	---	U		
9. Carbon Disulfide	0.23	100.0	---	U	---	U	---	U	---	U	---	U		
10. Methylene Chloride	0.64	1.0	6.30	---	U	---	U	6.40	---	U	---	U		
11. trans-1,2-Dichloroethene	0.23	5.0	---	U	---	U	---	U	---	U	---	U		
12. 1,1-Dichloroethane	0.20	5.0	3.20	J	1.10	J	3.50	J	3.40	J	0.80	J		
13. Vinyl Acetate	0.20	50.0	---	U	---	U	---	U	---	U	---	U		
14. Cis-1,2-Dichloroethene	0.25	5.0	8.30	---	U	---	U	8.00	---	U	21.00	---	U	
15. 2-Butanone	2.21	100.0	---	U	---	U	---	U	---	U	---	U		
16. Bromochloromethane	0.27	3.0	---	U	---	U	---	U	---	U	---	U		
17. Chloroform	0.25	5.0	---	U	---	U	---	U	---	U	---	U		
18. 1,1,1-Trichloroethane	0.19	1.0	---	U	---	U	---	U	---	U	---	U		
19. Carbon Tetrachloride	0.22	1.0	---	U	---	U	---	U	---	U	---	U		
20. Benzene	0.24	1.0	2.20	---	U	---	U	1.80	---	U	4.00	---	U	
21. 1,2-Dichloroethane	0.27	1.0	---	U	---	U	---	U	---	U	---	U		
22. Trichloroethene	0.23	1.0	2.00	---	U	---	U	0.90	J	---	U	1.20	---	U
23. 1,2-Dichloropropane	0.21	1.0	---	U	---	U	---	U	---	U	---	U		
24. Bromodichloromethane	0.21	1.0	---	U	---	U	---	U	---	U	---	U		
25. Cis-1,3-Dichloropropene	0.24	1.0	---	U	---	U	---	U	---	U	---	U		
26. 4-Methyl-2-Pentanone	1.19	100.0	---	U	---	U	---	U	---	U	---	U		
27. Toluene	0.23	1.0	---	U	---	U	---	U	---	U	---	U		
28. trans-1,3-Dichloropropene	0.28	1.0	---	U	---	U	---	U	---	U	---	U		
29. 1,1,2-Trichloroethane	0.25	1.0	---	U	---	U	---	U	---	U	---	U		
30. Tetrachloroethene	0.17	1.0	2.10	---	U	0.30	J	1.10	---	U	0.40	J	---	U
31. 2-Hexanone	1.57	50.0	---	U	---	U	---	U	---	U	---	U		
32. Dibromochloromethane	0.24	3.0	---	U	---	U	---	U	---	U	---	U		
33. 1,2-Dibromoethane	0.26	1.0	---	U	---	U	---	U	---	U	---	U		
34. Chlorobenzene	0.30	3.0	0.50	J	---	U	1.00	J	---	U	---	U		
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	---	U	---	U	---	U	---	U	---	U		
36. Ethylbenzene	0.21	1.0	---	U	---	U	---	U	---	U	---	U		
37. Xylenes	0.68	5.0	---	U	---	U	---	U	---	U	---	U		
38. Dibromomethane	0.28	10.0	---	U	---	U	---	U	---	U	---	U		
39. Styrene	0.19	1.0	---	U	---	U	---	U	---	U	---	U		
40. Bromoform	0.20	3.0	---	U	---	U	---	U	---	U	---	U		
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	---	U	---	U	---	U	---	U	---	U		
42. 1,2,3-Trichloropropane	0.43	1.0	---	U	---	U	---	U	---	U	---	U		
43. 1,4-Dichlorobenzene	0.39	1.0	1.70	---	U	---	U	2.20	---	U	0.80	J	---	U
44. 1,2-Dichlorobenzene	0.32	5.0	---	U	---	U	---	U	---	U	---	U		
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	---	U	---	U	---	U	---	U	---	U		
46. Acrylonitrile	2.72	200.0	---	U	---	U	---	U	---	U	---	U		
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	---	U	---	U	---	U	---	U	---	U		

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Inc.
 P.O. Box 7085, 114 Oakmont Dr.
 Greenville, NC 27858

Phone (252) 756-6208 • Fax (252) 756-0633

CLIENT: 6040 E Week: 43

HARNETT CO. (DUNN/ERWIN)
 GENERAL SERVICES HARNETT CO.
 MR. JERRY BLANCHARD, MANAGER
 900 SOUTH 9TH STREET
 LILLINGTON NC 27546

(919) 233-0407

CHAIN OF CUSTODY RECORD

SAMPLE LOCATION	COLLECTION		TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	DISINFECTION			FIELD PARAMETER	EPA 8260B	8260 Dup. 1	8260 Dup. 2	PARAMETERS	
	DATE	TIME				CHLORINE	UV	NONE						
Piezometer #41S	10/27/11	09:25		19	4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					CLASSIFICATION: <input type="checkbox"/> WASTEWATER (NPDES) <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> DWQGW <input checked="" type="checkbox"/> SOLID WASTE SECTION CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY SAMPLES COLLECTED BY: (Please Print) N. J. Paul SAMPLES RECEIVED IN LAB AT 6:20	
Piezometer #44S	10/27/11				1									
Piezometer #44D	10/27/11				1									
Piezometer #46D	10/27/11				1									
Piezometer #47S	10/27/11				1									
Piezometer #47D	10/27/11				1									
Piezometer #46S	10/27/11				1									
Piezometer #50	10/27/11				1									
Piezometer #51	10/27/11				1									
Piezometer #52	10/27/11				1									
Piezometer #53	10/27/11				1									
RELINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)		DATE/TIME
COMMENTS														

FORM #5

PLEASE READ instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested. No. 231207

Environment 1, Inc.
 P.O. Box 7085, 114 Oakmont Dr.
 Greenville, NC 27858

CHAIN OF CUSTODY RECORD

Phone (252) 756-6208 • Fax (252) 756-0633

CLIENT: 6040 E Week: 43

HARNETT CO. (DUNN/ERWIN)
 GENERAL SERVICES HARNETT CO.
 MR. JERRY BLANCHARD, MANAGER
 900 SOUTH 9TH STREET
 LILLINGTON NC 27546

(919) 233-0407

SAMPLE LOCATION	COLLECTION		TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	DISINFECTION			Field Parameter	EPA 8260B	8260 Dup. 1	8260 Dup. 2	PARAMETERS	CLASSIFICATION	CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY	SAMPLER COLLECTED BY: (Please Print)	SAMPLES RECEIVED IN LAB AT	
	DATE	TIME				<input type="checkbox"/> CHLORINE	<input type="checkbox"/> UV	<input type="checkbox"/> NONE										
Piezometer #54	10/27/11				1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					A - NONE B - HNO ₃ C - H ₂ SO ₄ G - NA THIOSULFATE	<input type="checkbox"/> WASTEWATER (NPDES) <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> DM/GW <input checked="" type="checkbox"/> SOLID WASTE SECTION	...	Boyer	0.2 °C	
Piezometer #55	10/27/11				1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
Piezometer #56	10/27/11				1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
Piezometer #57	10/27/11				1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
Piezometer #58	10/27/11				1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
Piezometer #59	10/27/11				1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
GP-24-W	10/27/11	0945			3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
GP-25-W	10/27/11				1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
GP-27-W	10/27/11				1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
GP-28-W	10/27/11				1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
GP-30-W	10/27/11	0930			3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
RELINQUISHED BY (SIG.)	DATE/TIME	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME
<i>[Signature]</i>	10/27/11		<i>[Signature]</i>	10/27/11														
RELINQUISHED BY (SIG.)	DATE/TIME	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME
<i>[Signature]</i>	10/27/11		<i>[Signature]</i>	10/27/11														
RELINQUISHED BY (SIG.)	DATE/TIME	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME
<i>[Signature]</i>	10/27/11		<i>[Signature]</i>	10/27/11														

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

Environment 1, Inc.
 P.O. Box 7085, 114 Calmont Dr.
 Greenville, NC 27858

Phone (252) 756-6208 • Fax (252) 756-0633

CLIENT: 6040 E Week: 43

HARNETT CO. (DUNN/RWIN)
 GENERAL SERVICES HARNETT CO.
 MR. JERRY BLANCHARD, MANAGER
 900 SOUTH 9TH STREET
 LILLINGTON NC 27546

(919) 233-0407

CHAIN OF CUSTODY RECORD

SAMPLE LOCATION	COLLECTION		TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	DISINFECTION			Field Parameter	EPA 8260B	8260 Dup. 1	8260 Dup. 2	COMMENTS	PARAMETERS	CLASSIFICATION:
	DATE	TIME				<input type="checkbox"/> CHLORINE	<input type="checkbox"/> UV	<input type="checkbox"/> NONE							
GP-31-W	10/27/11				1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
GP-33-W	10/27/11				1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
GP-34-W	10/27/11				1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
GP-35-W	10/27/11				1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
GP-36-W	10/27/11				1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
GP-37-W	10/27/11	1110			3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
GP-38-W	10/27/11	1300			3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>							
RELINQUISHED BY (SIG.)	DATE/TIME	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME
<i>[Signature]</i>			<i>[Signature]</i>		<i>[Signature]</i>										
RELINQUISHED BY (SIG.)	DATE/TIME	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME
<i>[Signature]</i>			<i>[Signature]</i>		<i>[Signature]</i>										
RELINQUISHED BY (SIG.)	DATE/TIME	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME

PLEASE READ Instructions for completing this form on the reverse side.

CHLORINE NEUTRALIZED AT COLLECTION

pH CHECK (LAB)

CONTAINER TYPE, P/G

CHEMICAL PRESERVATION

A - NONE D - NaOH
 B - HNO₃ E - HCL
 C - H₂SO₄ F - ZINC ACETATE
 G - Na THIOSULFATE

CLASSIFICATION:

WASTEWATER (NPDES)
 DRINKING WATER
 DMOWG
 SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY

SAMPLES COLLECTED BY: *[Signature]*
 (Please Print)

SAMPLES RECEIVED IN LAB AT 6.2 °C

FORM #5

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

No 231205

Environment 1, Incorporated

Business Water Use 17715
HARREWSLEY 17710

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6040

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

DATE COLLECTED: 10/27/11
DATE REPORTED: 11/23/11

REVIEWED BY: 

PARAMETERS	MDL	SWSL	MW-5B	MW-7B	MW-8	MW-9	MW-10	Analysis		Method Code
								Date	Analyst	
PH (field measurement), Units			5.5	5.1	4.5	Missing	Missing	10/27/11	RJH	SM4500HB
Cyanide, ug/l	5.0	10.0	--- U	--- U	--- U	Missing	Missing	11/04/11	SEJ	SM4500 CN-
Antimony, ug/l	0.14	6.0	--- U	--- U	--- U	Missing	Missing	11/07/11	LFJ	EPA200.8
Arsenic, ug/l	0.10	10.0	0.97 J	0.53 J	--- U	Missing	Missing	11/07/11	LFJ	EPA200.8
Barium, ug/l	0.02	100.0	145	318	94.8 J	Missing	Missing	11/07/11	LFJ	EPA200.8
Beryllium, ug/l	0.02	1.0	0.11 J	0.15 J	0.67 J	Missing	Missing	11/07/11	LFJ	EPA200.8
Cadmium, ug/l	0.02	1.0	0.15 J	0.19 J	0.07 J	Missing	Missing	11/07/11	LFJ	EPA200.8
Cobalt, ug/l	0.03	10.0	39	28	1.4 J	Missing	Missing	11/07/11	LFJ	EPA200.8
Copper, ug/l	0.02	10.0	3.3 J	2.5 J	1.4 J	Missing	Missing	11/07/11	LFJ	EPA200.8
Total Chromium, ug/l	0.04	10.0	2.9 J	--- U	--- U	Missing	Missing	11/07/11	LFJ	EPA200.8
Lead, ug/l	0.02	10.0	3.4 J	34	1.3 J	Missing	Missing	11/07/11	LFJ	EPA200.8
Mercury, ug/l	0.05	0.20	--- U	0.32	0.47	Missing	Missing	11/07/11	LFJ	EPA200.8
Nickel, ug/l	0.04	50.0	2.2 J	1.7 J	1.9 J	Missing	Missing	11/07/11	LFJ	EPA200.8
Selenium, ug/l	0.20	10.0	0.40 J	--- U	0.28 J	Missing	Missing	11/07/11	LFJ	EPA200.8
Silver, ug/l	0.02	10.0	--- U	--- U	--- U	Missing	Missing	11/07/11	LFJ	EPA200.8
Thallium, ug/l	0.02	5.5	0.35 J	1.0 J	--- U	Missing	Missing	11/07/11	LFJ	EPA200.8
Tin, ug/l	0.15	100.0	0.43 J	0.29 J	--- U	Missing	Missing	11/07/11	LFJ	EPA200.8
Vanadium, ug/l	0.14	25.0	10.9 J	0.85 J	0.95 J	Missing	Missing	11/07/11	LFJ	EPA200.8
Zinc, ug/l	0.24	10.0	6.2 J	4.6 J	7.5 J	Missing	Missing	11/07/11	LFJ	EPA200.8
Turbidity, NTU	1.0	1.0	170	40	4.4	Missing	Missing	10/27/11	NEL	SM2130B
Sulfide, ug/l	100	1000	--- U	--- U	--- U	Missing	Missing	11/02/11	LFJ	SM4500-S2D
Conductivity (at 25c), uMhos/cm	1.0	1.0	215	1172	105	Missing	Missing	10/27/11	RJH	SM2510B
Temperature, °C			22	20	20	Missing	Missing	10/27/11	RJH	SM2550B
Static Water Level, feet			17.17	26.38	16.98	Missing	Missing	10/27/11	RJH	
Well Depth, feet			23.11	30.23	25.22	Missing	Missing	10/27/11	RJH	
Water Railed, Gals.			2.4	1.5	3.9	Missing	Missing	10/27/11	RJH	

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

SP11R170 Water ID: 10714
WATERWAY: 10714

PO. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6040

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

DATE COLLECTED: 10/27/11
DATE REPORTED : 11/23/11

REVIEWED BY: 

PARAMETERS	MDL	Equipment		Trip Blank	Analysis		Method Code
		SWSL	Blank		Date	Analyst	
Cyanide, ug/l	5.0	10.0	---	U	11/04/11	SEJ	SM4500 CN-X
Antimony, ug/l	0.14	6.0	---	U	11/07/11	LFJ	EPA200.8
Arsenic, ug/l	0.10	10.0	---	U	11/07/11	LFJ	EPA200.8
Barium, ug/l	0.02	100.0	0.15	J	11/07/11	LFJ	EPA200.8
Beryllium, ug/l	0.02	1.0	---	U	11/07/11	LFJ	EPA200.8
Cadmium, ug/l	0.02	1.0	---	U	11/07/11	LFJ	EPA200.8
Cobalt, ug/l	0.03	10.0	---	U	11/07/11	LFJ	EPA200.8
Copper, ug/l	0.02	10.0	0.56	J	11/07/11	LFJ	EPA200.8
Total Chromium, ug/l	0.04	10.0	---	U	11/07/11	LFJ	EPA200.8
Lead, ug/l	0.02	10.0	0.05	J	11/07/11	LFJ	EPA200.8
Mercury, ug/l	0.05	0.20	---	U	11/07/11	LFJ	EPA200.8
Nickel, ug/l	0.04	50.0	0.74	J	11/07/11	LFJ	EPA200.8
Selenium, ug/l	0.20	10.0	---	U	11/07/11	LFJ	EPA200.8
Silver, ug/l	0.02	10.0	---	U	11/07/11	LFJ	EPA200.8
Thallium, ug/l	0.02	5.5	---	U	11/07/11	LFJ	EPA200.8
Tin, ug/l	0.16	100.0	---	U	11/07/11	LFJ	EPA200.8
Vanadium, ug/l	0.14	25.0	---	U	11/07/11	LFJ	EPA200.8
Zinc, ug/l	0.24	10.0	1.6	J	11/07/11	LFJ	EPA200.8
Sulfide, ug/l	100	1000	9512		11/02/11	LFJ	SM4500-S2D

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

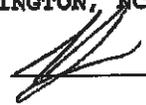
PROSINO 04/01/11
 PESTICIDES 10.11

P.O. BOX 7085, 114 OAKMONT DRIVE
 GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
 FAX (252) 756-0633

CLIENT: HARNETT CO. (DUNN/ERWIN)
 GENERAL SERVICES HARNETT CO.
 MR. JERRY BLANCHARD, MANAGER
 900 SOUTH 9TH STREET
 LILLINGTON, NC 27546

CLIENT ID: 6040
 ANALYST: CHS
 DATE COLLECTED: 10/27/11
 DATE EXTRACTED: 11/01/11
 DATE ANALYZED: 11/02/11
 DATE REPORTED: 11/23/11

REVIEWED BY: 

PESTICIDES AND PCB'S EPA METHOD 8081B

PARAMETERS, ug/l	MDL	SNBL	MW-6B	MW-7B	MW-8	Equipment Blank
1. Aldrin	0.029	0.05	--- U	--- U	--- U	--- U
2. Alpha-BHC	0.032	0.05	--- U	--- U	--- U	--- U
3. Beta-BHC	0.031	0.05	--- U	--- U	--- U	--- U
4. Delta-BHC	0.030	0.05	--- U	--- U	--- U	--- U
5. Gamma-BHC (Lindane)	0.032	0.05	--- U	--- U	--- U	--- U
6. Chlordane	0.320	0.50	--- U	--- U	--- U	--- U
7. 4,4-DDD	0.051	0.10	--- U	--- U	--- U	--- U
8. 4,4-DDX	0.049	0.10	--- U	--- U	--- U	--- U
9. 4,4-DDT	0.052	0.10	--- U	--- U	--- U	--- U
10. Dieldrin	0.042	0.075	--- U	--- U	--- U	--- U
11. Endosulfan I	0.056	0.10	--- U	--- U	--- U	--- U
12. Endosulfan II	0.046	0.10	--- U	--- U	--- U	--- U
13. Endosulfan Sulfate	0.072	0.10	--- U	--- U	--- U	--- U
14. Endrin	0.053	0.10	--- U	--- U	--- U	--- U
15. Endrin Aldehyde	0.068	0.10	--- U	--- U	--- U	--- U
16. Heptachlor	0.039	0.05	--- U	--- U	--- U	--- U
17. Heptachlor Epoxide	0.042	0.075	--- U	--- U	--- U	--- U
18. Methoxychlor	0.530	1.00	--- U	--- U	--- U	--- U
19. PCB's (Aroclors)	0.500	2.00	--- U	--- U	--- U	--- U
20. Toxaphene	0.690	1.50	--- U	--- U	--- U	--- U

U = Between MDL and SNBL, --- U = Below ALL Quantitation Limits.

Environment 1, Incorporated

DEVELOPING MARKET ID: 11/11

WASTEWATER ID: 10

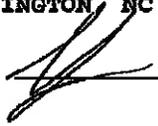
P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

CLIENT ID: 6040

ANALYST: CHS
DATE COLLECTED: 10/27/11
DATE EXTRACTED: 11/02/11
DATE ANALYZED: 11/16/11
DATE REPORTED: 11/23/11

REVIEWED BY: 

LANDFILL APPENDIX II EPA METHOD 8151A

PARAMETERS, ug/l	MDL	SWSL	MW-6B	MW-7B	MW-8	Equipment Blank
1. 2,4-D	0.36	2.0	--- U	--- U	--- U	--- U
2. Dinoseb	0.54	1.0	--- U	--- U	--- U	--- U
3. 2,4,5-TF	0.42	2.0	--- U	--- U	--- U	--- U
4. 2,4,5-T	0.47	2.0	--- U	--- U	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

DRINKING WATER ID: 7773
WASTEWATER ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

CLIENT ID: 6040
ANALYST: CHS
DATE COLLECTED: 10/27/11
DATE EXTRACTED: 11/01/11
DATE ANALYZED: 11/08/11
DATE REPORTED: 11/23/11

Page: 1

REVIEWED BY: 

SEMI-VOLATILE ORGANICS EPA METHOD 8270C

PARAMETERS, ug/l	MDL	SMGL	MW-6B	MW-7B	MW-8	Equipment Blank
1. Acenaphthene	2.66	10.0	--- U	--- U	--- U	--- U
2. Acenaphthylene	2.60	10.0	--- U	--- U	--- U	--- U
3. Anthracene	2.97	10.0	--- U	--- U	--- U	--- U
4. Benzo[a]anthracene	4.16	10.0	--- U	--- U	--- U	--- U
5. Benzo[b]fluoranthene	3.32	10.0	--- U	--- U	--- U	--- U
6. Benzo[k]fluoranthene	4.23	10.0	--- U	--- U	--- U	--- U
7. Benzo[g,h,i]perylene	2.61	10.0	--- U	--- U	--- U	--- U
8. Benzo[a]pyrene	3.27	10.0	--- U	--- U	--- U	--- U
9. 4-Bromophenyl Phenyl Ether	2.63	10.0	--- U	--- U	--- U	--- U
10. Butyl Benzyl Phthalate	5.78	10.0	--- U	--- U	--- U	--- U
11. Bis-(2-Chloroethoxy) Methane	3.14	10.0	--- U	--- U	--- U	--- U
12. Bis-(2-Chloroethyl) Ether	2.58	10.0	--- U	--- U	--- U	--- U
13. Bis-(2-Chloroisopropyl) Ether	2.58	10.0	--- U	--- U	--- U	--- U
14. 2-Chloronaphthalene	2.17	10.0	--- U	--- U	--- U	--- U
15. 4-Chlorophenyl Phenyl Ether	2.42	10.0	--- U	--- U	--- U	--- U
16. Chrysene	4.04	10.0	--- U	--- U	--- U	--- U
17. Dibenzo[a,h]anthracene	2.78	10.0	--- U	--- U	--- U	--- U
18. Di-N-Butyl Phthalate	3.09	10.0	--- U	--- U	--- U	--- U
19. Dimethyl Phthalate	3.78	10.0	--- U	--- U	--- U	--- U
20. Diethyl Phthalate	3.92	10.0	--- U	--- U	--- U	--- U
21. 2,4-Dinitrotoluene	3.95	10.0	--- U	--- U	--- U	--- U
22. 2,6-Dinitrotoluene	3.88	10.0	--- U	--- U	--- U	--- U
23. Di-N-Octyl Phthalate	2.81	10.0	--- U	--- U	--- U	--- U
24. Bis-(2-Ethylhexyl) Phthalate	9.97	15.0	--- U	--- U	--- U	--- U
25. Fluoranthene	3.92	10.0	--- U	--- U	--- U	--- U
26. Fluorene	2.95	10.0	--- U	--- U	--- U	--- U
27. Hexachlorobenzene	2.61	10.0	--- U	--- U	--- U	--- U
28. Hexachlorocyclopentadiene	4.16	10.0	--- U	--- U	--- U	--- U
29. Indeno[1,2,3-cd]pyrene	2.91	10.0	--- U	--- U	--- U	--- U
30. Isophorone	3.74	10.0	--- U	--- U	--- U	--- U
31. Nitrobenzene	2.85	10.0	--- U	--- U	--- U	--- U
32. N-Nitrosodimethylamine	4.25	10.0	--- U	--- U	--- U	--- U
33. N-Nitrosodiphenylamine	3.95	10.0	--- U	--- U	--- U	--- U
34. N-Nitrosodi-N-Propylamine	4.06	10.0	--- U	--- U	--- U	--- U
35. Phenanthrene	3.24	10.0	--- U	--- U	--- U	--- U
36. Pyrene	3.63	10.0	--- U	--- U	--- U	--- U
37. 4-Chloro-3-Methylphenol	3.79	20.0	--- U	--- U	--- U	--- U
38. 2-Chlorophenol	2.75	10.0	--- U	--- U	--- U	--- U
39. O-Cresol	3.68	10.0	--- U	--- U	--- U	--- U
40. P-Cresol	4.12	10.0	--- U	--- U	--- U	--- U
41. 2,4-Dichlorophenol	5.19	10.0	--- U	--- U	--- U	--- U
42. 2,6-Dichlorophenol	4.89	10.0	--- U	--- U	--- U	--- U
43. 2,4-Dimethylphenol	3.21	10.0	--- U	--- U	--- U	--- U
44. 4,6-Dinitro-2-Methylphenol	4.77	50.0	--- U	--- U	--- U	--- U
45. 2,4-Dinitrophenol	4.37	50.0	--- U	--- U	--- U	--- U
46. Ethyl Methanesulfonate	5.26	20.0	--- U	--- U	--- U	--- U
47. Methyl Methanesulfonate	4.92	10.0	--- U	--- U	--- U	--- U
48. 2-Nitrophenol	3.64	10.0	--- U	--- U	--- U	--- U

J = Between MDL and SMGL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

Drinking Water 20: 3730
 Wastewater 10: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
 GREENVILLE, N.C. 27835-7085

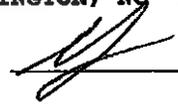
PHONE (252) 756-6208
 FAX (252) 756-0633

CLIENT: HARNETT CO. (DUNN/ERWIN)
 GENERAL SERVICES HARNETT CO.
 MR. JERRY BLANCHARD, MANAGER
 900 SOUTH 9TH STREET
 LILLINGTON, NC 27546

CLIENT ID: 6040

ANALYST: CHS
 DATE COLLECTED: 10/27/11
 DATE EXTRACTED: 11/01/11
 DATE ANALYZED: 11/08/11
 DATE REPORTED: 11/23/11

Page: 2

REVIEWED BY: 

SEMI-VOLATILE ORGANICS EPA METHOD 8270C

PARAMETERS, ug/l	MDL	SWSL	NW-6B	NW-7B	NW-9	Equipment Blank
49. 4-Nitrophenol	3.17	50.0	---	U	---	U
50. Pentachlorophenol	5.33	25.0	---	U	---	U
51. Phenol	1.86	10.0	---	U	---	U
52. 2,3,4,6-Tetrachlorophenol	3.12	10.0	---	U	---	U
53. 2,4,5-Trichlorophenol	4.17	10.0	---	U	---	U
54. 2,4,6-Trichlorophenol	3.84	10.0	---	U	---	U
55. Acetophenone	2.89	10.0	---	U	---	U
56. 2-Acetylaminofluorene	3.98	20.0	---	U	---	U
57. 4-Aminobiphenyl	4.12	20.0	---	U	---	U
58. Benzyl Alcohol	4.47	20.0	---	U	---	U
59. 4-Chloroaniline	3.36	20.0	---	U	---	U
60. Chlorobenzilate	5.12	10.0	---	U	---	U
61. Diallate	2.98	10.0	---	U	---	U
62. Dibenzofuran	4.28	10.0	---	U	---	U
63. 3,3-Dichlorobenzidine	4.22	20.0	---	U	---	U
64. Dimethoate	3.98	20.0	---	U	---	U
65. P-Dimethylaminoazobenzene	2.89	10.0	---	U	---	U
66. 7,12-Dimethylbenz(a)anthracene	5.26	10.0	---	U	---	U
67. 3,3-Dimethylbenzadine	3.21	10.0	---	U	---	U
68. 1,3-Dinitrobenzene	2.89	20.0	---	U	---	U
69. Diphenylamine	5.10	10.0	---	U	---	U
70. Disulfoton	4.28	10.0	---	U	---	U
71. Famphur	3.98	20.0	---	U	---	U
72. Hexachloropropene	4.31	10.0	---	U	---	U
73. Isosafrole	2.88	10.0	---	U	---	U
74. Kepone	2.78	20.0	---	U	---	U
75. Methapyrilene	3.54	100.0	---	U	---	U
76. 3-Methylchloroanthrene	4.21	10.0	---	U	---	U
77. 2-Methylnaphthalene	3.79	10.0	---	U	---	U
78. Methyl Parathion	4.32	10.0	---	U	---	U
79. m-Cresol	3.81	10.0	---	U	---	U
80. 1,4-Naphthoquinone	4.00	10.0	---	U	---	U
81. 1-Naphthylamine	5.61	10.0	---	U	---	U
82. 2-Naphthylamine	4.62	10.0	---	U	---	U
83. 2-Nitroaniline	3.61	50.0	---	U	---	U
84. 3-Nitroaniline	4.81	50.0	---	U	---	U
85. 4-Nitroaniline	4.22	20.0	---	U	---	U
86. 5-Nitro-O-Toluidine	4.01	10.0	---	U	---	U
87. N-Nitrosodi-n-butylamine	3.63	10.0	---	U	---	U
88. N-Nitrosodiethylamine	3.83	20.0	---	U	---	U
89. N-Nitrosomethylethylamine	3.83	10.0	---	U	---	U
90. N-Nitrosopiperidine	5.19	20.0	---	U	---	U
91. N-Nitrosopyrrolidine	2.89	10.0	---	U	---	U
92. Parathion	3.12	10.0	---	U	---	U
93. Pentachlorobenzene	3.92	10.0	---	U	---	U
94. Pentachloronitrobenzene	3.71	20.0	---	U	---	U
95. Phenacetin	4.41	20.0	---	U	---	U
96. 1,4 Benzenediamine	2.99	10.0	---	U	---	U

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

Drinking Water 10:37:18
 Wastewater 10:10

P.O. BOX 7085, 114 OAKMONT DRIVE
 GREENVILLE, N.C. 27835-7085

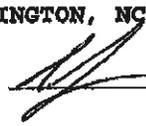
PHONE (252) 756-6208
 FAX (252) 756-0633

CLIENT: HARNETT CO. (DUNN/ERWIN)
 GENERAL SERVICES HARNETT CO.
 MR. JERRY BLANCHARD, MANAGER
 900 SOUTH 9TH STREET
 LILLINGTON, NC 27546

CLIENT ID: 6040

ANALYST: CHS
 DATE COLLECTED: 10/27/11
 DATE EXTRACTED: 11/01/11
 DATE ANALYZED: 11/08/11
 DATE REPORTED: 11/23/11

Page: 3

REVIEWED BY: 

SEMI-VOLATILE ORGANICS EPA METHOD 8270C

PARAMETERS, ug/l	MDL	SNL	MW-6B	MW-7B	MW-8	Equipment Blank
97. Phorate	3.86	10.0	--- U	--- U	--- U	--- U
98. Pronamide	3.69	10.0	--- U	--- U	--- U	--- U
99. Safrole	4.12	10.0	--- U	--- U	--- U	--- U
100. 1,2,4,5-Tetrachlorobenzene	5.01	10.0	--- U	--- U	--- U	--- U
101. Thionazin	4.62	20.0	--- U	--- U	--- U	--- U
102. O-Toluidine	4.11	10.0	--- U	--- U	--- U	--- U
103. 1,3,5-Trinitrobenzene	3.98	10.0	--- U	--- U	--- U	--- U
104. 0,0,0-Triethyl Phosphorothioate	3.61	10.0	--- U	--- U	--- U	--- U
105. Hexachloroethane	1.49	10.0	--- U	--- U	--- U	--- U
106. Isodrin	3.11	20.0	--- U	--- U	--- U	--- U

U - Between MDL and SNL, U - Below ALL Quantitation Limits.

Environment 1, Incorporated

Drinking Water ID: 10711
 Hazardous ID: 11

PO BOX 7085, 114 OAKMONT DRIVE
 GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
 FAX (252) 756-0633

CLIENT: HARNETT CO. (DUNN/ERWIN)
 GENERAL SERVICES HARNETT CO.
 MR. JERRY BLANCHARD, MANAGER
 900 SOUTH 9TH STREET
 LILLINGTON, NC 27546

CLIENT ID: 6040
 ANALYST: MAO
 DATE COLLECTED: 10/27/11
 DATE ANALYZED: 11/04/11
 DATE REPORTED: 11/23/11

Page: 1

REVIEWED BY: 

LANDFILL APPENDIX II EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	MW-6B	MW-7B	MW-8	Equipment Blank	Trip Blank	
1. Chloromethane	0.77	1.0	---	U	---	U	---	U
2. Vinyl Chloride	0.63	1.0	9.20	7.20	2.60	---	U	
3. Bromomethane	0.67	10.0	---	U	---	U	---	U
4. Chloroethane	0.48	10.0	1.60 J	4.30 J	---	U	---	U
5. Trichlorofluoromethane	0.24	1.0	---	U	0.90 J	---	U	
6. 1,1-Dichloroethene	0.17	5.0	0.20 J	2.80 J	0.30 J	---	U	
7. Acetone	9.06	100.0	---	U	16.10 J	---	U	
8. Iodomethane	0.26	10.0	---	U	---	U	---	U
9. Carbon Disulfide	0.23	100.0	---	U	---	U	---	U
10. Methylene Chloride	0.64	1.0	---	U	70.20	39.30	---	U
11. trans-1,2-Dichloroethene	0.23	5.0	---	U	---	U	---	U
12. 1,1-Dichloroethane	0.20	5.0	5.30	142.00	37.60	---	U	
13. Vinyl Acetate	0.20	50.0	---	U	---	U	---	U
14. Cis-1,2-Dichloroethene	0.25	5.0	27.60	10.00	33.60	---	U	
15. 2-Butanone	2.21	100.0	---	U	---	U	---	U
16. Bromochloromethane	0.27	3.0	---	U	---	U	---	U
17. Chloroform	0.25	5.0	---	U	---	U	---	U
18. 1,1,1-Trichloroethane	0.19	1.0	---	U	---	U	---	U
19. Carbon Tetrachloride	0.22	1.0	---	U	---	U	---	U
20. Benzene	0.24	1.0	6.70	6.90	4.90	---	U	
21. 1,2-Dichloroethene	0.21	1.0	0.50 J	0.30 J	0.40 J	---	U	
22. Trichloroethene	0.23	1.0	7.10	10.50	4.70	---	U	
23. 1,2-Dichloropropane	0.21	1.0	---	U	---	U	---	U
24. Bromodichloromethane	0.21	1.0	---	U	---	U	---	U
25. Cis-1,3-Dichloropropene	0.24	1.0	---	U	---	U	---	U
26. 4-Methyl-2-Pentanone	1.19	100.0	---	U	---	U	---	U
27. Toluene	0.23	1.0	---	U	---	U	---	U
28. trans-1,3-Dichloropropene	0.28	1.0	---	U	---	U	---	U
29. 1,1,2-Trichloroethane	0.25	1.0	---	U	---	U	---	U
30. Tetrachloroethene	0.17	1.0	6.90	5.70	4.60	---	U	
31. 2-Hexanone	1.57	50.0	---	U	---	U	---	U
32. Dibromochloromethane	0.24	3.0	---	U	---	U	---	U
33. 1,2-Dibromoethane	0.26	1.0	---	U	---	U	---	U
34. Chlorobenzene	0.30	3.0	0.90 J	0.90	1.50 J	---	U	
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	---	U	---	U	---	U
36. Ethylbenzene	0.21	1.0	---	U	---	U	---	U
37. Xylenes	0.68	5.0	---	U	2.30 J	---	U	
38. Dibromomethane	0.28	10.0	---	U	---	U	---	U
39. Styrene	0.19	1.0	---	U	---	U	---	U
40. Bromoform	0.20	3.0	---	U	---	U	---	U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	---	U	---	U	---	U
42. 1,2,3-Trichloropropane	0.43	1.0	---	U	---	U	---	U
43. 1,4-Dichlorobenzene	0.39	1.0	8.00	2.10	4.50	---	U	
44. 1,2-Dichlorobenzene	0.32	5.0	---	U	1.60 J	---	U	
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	---	U	---	U	---	U
46. Acrylonitrile	2.72	200.0	---	U	---	U	---	U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	---	U	---	U	---	U
48. Acrolein	40.57	53.0	---	U	---	U	---	U

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

DELIVER TO: 11/27/11
 RECEIVED: 10/10

P.O. BOX 7085, 114 OAKMONT DRIVE
 GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
 FAX (252) 756-0633

CLIENT: HARNETT CO. (DUNN/ERWIN)
 GENERAL SERVICES HARNETT CO.
 MR. JERRY BLANCHARD, MANAGER
 900 SOUTH 9TH STREET
 LILLINGTON, NC 27546

CLIENT ID: 6040

ANALYST: MAO
 DATE COLLECTED: 10/27/11
 DATE ANALYZED: 11/04/11
 DATE REPORTED: 11/23/11

Page: 2

REVIEWED BY: 

LANDFILL APPENDIX II EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	MW-6B	MW-7B	MW-8	Equipment Blank	Trip Blank
49. Allyl Chloride	0.20	10.0	--- U	--- U	--- U	--- U	--- U
50. Chloroprene	0.21	20.0	--- U	--- U	--- U	--- U	--- U
51. 1,3-Dichlorobenzene	0.41	5.0	--- U	--- U	--- U	--- U	--- U
52. Dichlorodifluoromethane	0.51	5.0	1.20 J	9.50 J	1.70 J	--- U	--- U
53. 1,3-Dichloropropane	0.28	1.0	--- U	--- U	--- U	--- U	--- U
54. 2,2-Dichloropropane	0.17	15.0	--- U	--- U	--- U	--- U	--- U
55. 1,1-Dichloropropene	0.22	5.0	--- U	--- U	--- U	--- U	--- U
56. Ethyl Methacrylate	0.16	10.0	--- U	--- U	--- U	--- U	--- U
57. Hexachlorobutadiene	0.57	10.0	--- U	--- U	--- U	--- U	--- U
58. Isobutyl Alcohol	12.80	100.0	--- U	--- U	--- U	--- U	--- U
59. Methacrylonitrile	1.93	100.0	--- U	--- U	--- U	--- U	--- U
60. Methyl Methacrylate	0.25	30.0	--- U	--- U	--- U	--- U	--- U
61. Naphthalene	0.47	10.0	--- U	--- U	--- U	--- U	--- U
62. Propionitrile	3.26	150.0	--- U	--- U	--- U	--- U	--- U
63. 1,2,4-Trichlorobenzene	0.50	10.0	--- U	--- U	--- U	--- U	--- U
64. Acetonitrile	36.29	55.0	--- U	--- U	--- U	--- U	--- U
65. Tetrahydrofuran	0.39	1.0	--- U	1.00	1.40	--- U	--- U

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

DUPLICATE ANALYSIS ID: 47211
 ANALYSIS ID: 10

PO BOX 7085, 114 OAKMONT DRIVE
 GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
 FAX (252) 756-0633

ID#: 6040 A

HARNETT CO. (DUNN/ERWIN)
 GENERAL SERVICES HARNETT CO.
 MR. JERRY BLANCHARD, MANAGER
 900 SOUTH 9TH STREET
 LILLINGTON, NC 27546

DATE COLLECTED: 10/27/11
 DATE REPORTED: 11/08/11

REVIEWED BY: 

PARAMETERS	MDL	SW-1	SW-2	SW-3	SW-4	Analysis	Method
		SWSL				Date	Analyst Code
PH (field measurement), Units		Missing	Missing	4.1	Missing	10/27/11 RJH	SM4500HB
Antimony, ug/l	0.14	6.0 Missing	Missing	---	U Missing	11/07/11 LFJ	EPA200.8
Arsenic, ug/l	0.10	10.0 Missing	Missing	0.38	J Missing	11/07/11 LFJ	EPA200.8
Barium, ug/l	0.02	100.0 Missing	Missing	124	Missing	11/07/11 LFJ	EPA200.8
Beryllium, ug/l	0.02	1.0 Missing	Missing	---	U Missing	11/07/11 LFJ	EPA200.8
Cadmium, ug/l	0.02	1.0 Missing	Missing	0.04	J Missing	11/07/11 LFJ	EPA200.8
Cobalt, ug/l	0.03	10.0 Missing	Missing	5.0	J Missing	11/07/11 LFJ	EPA200.8
Copper, ug/l	0.02	10.0 Missing	Missing	0.80	J Missing	11/07/11 LFJ	EPA200.8
Total Chromium, ug/l	0.04	10.0 Missing	Missing	---	U Missing	11/07/11 LFJ	EPA200.8
Lead, ug/l	0.02	10.0 Missing	Missing	0.19	J Missing	11/07/11 LFJ	EPA200.8
Nickel, ug/l	0.04	50.0 Missing	Missing	2.3	J Missing	11/07/11 LFJ	EPA200.8
Selenium, ug/l	0.20	10.0 Missing	Missing	---	U Missing	11/07/11 LFJ	EPA200.8
Silver, ug/l	0.02	10.0 Missing	Missing	---	U Missing	11/07/11 LFJ	EPA200.8
Thallium, ug/l	0.02	5.5 Missing	Missing	---	U Missing	11/07/11 LFJ	EPA200.8
Vanadium, ug/l	0.14	25.0 Missing	Missing	0.43	J Missing	11/07/11 LFJ	EPA200.8
Zinc, ug/l	0.24	10.0 Missing	Missing	23	Missing	11/07/11 LFJ	EPA200.8
Turbidity, NTU	1.0	1.0 Missing	Missing	13	Missing	10/27/11 HBL	SM2130B
Conductivity (at 25c), uMhos/cm	1.0	1.0 Missing	Missing	715	Missing	10/27/11 RJH	SM2510B
Temperature, °C		Missing	Missing	21	Missing	10/27/11 RJH	SM2550B

Environment 1, Incorporated

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
 WATERWAYS DIVISION

P.O. BOX 7085, 114 OAKMONT DRIVE
 GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
 FAX (252) 756-0633

CLIENT: HARNETT CO. (DUNN/ERWIN)
 GENERAL SERVICES HARNETT CO.
 MR. JERRY BLANCHARD, MANAGER
 900 SOUTH 9TH STREET
 LILLINGTON, NC 27546

CLIENT ID: 6040 A
 ANALYST: MAO
 DATE COLLECTED: 10/27/11
 DATE ANALYZED: 11/01/11
 DATE REPORTED: 11/08/11

Page: 1

REVIEWED BY: _____

VOLATILE ORGANICS EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	SW-3
1. Chloromethane	0.77	1.0	--- U
2. Vinyl Chloride	0.63	1.0	--- U
3. Bromomethane	0.67	10.0	--- U
4. Chloroethane	0.48	10.0	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U
7. Acetone	9.06	100.0	20.90 J
8. Iodomethane	0.26	10.0	--- U
9. Carbon Disulfide	0.23	100.0	--- U
10. Methylene Chloride	0.64	1.0	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U
13. Vinyl Acetate	0.20	50.0	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U
15. 2-Butanone	2.21	100.0	--- U
16. Bromochloromethane	0.27	3.0	--- U
17. Chloroform	0.25	5.0	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U
20. Benzene	0.24	1.0	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U
22. Trichloroethene	0.23	1.0	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U
24. Bromodichloromethane	0.21	1.0	--- U
25. Cis-1,3-Dichloropropane	0.24	1.0	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U
27. Toluene	0.23	1.0	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U
30. Tetrachloroethene	0.17	1.0	--- U
31. 2-Hexanone	1.57	50.0	--- U
32. Dibromochloromethane	0.24	3.0	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U
34. Chlorobenzene	0.30	3.0	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U
36. Ethylbenzene	0.21	1.0	--- U
37. Xylenes	0.68	5.0	--- U
38. Dibromomethane	0.28	10.0	--- U
39. Styrene	0.19	1.0	--- U
40. Bromoform	0.20	3.0	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U
46. Acrylonitrile	2.72	200.0	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U
48. Tetrahydrofuran	0.39	1.0	--- U

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Enviroform Part 1, Inc.
 P.O. Box 7085, 114 Oakmont Dr.
 Greenville, NC 27858

CHAIN OF CUSTODY RECORD

Phone (252) 756-6208 • Fax (252) 756-0633

CLIENT: 6040 A Weeks: 43

HARNETT CO. (DUNN/ERWIN)
 GENERAL SERVICES HARNETT CO.
 MR. JERRY BLANCHARD, MANAGER
 900 SOUTH 9TH STREET
 LILLINGTON NC 27546

(919) 233-0407

SAMPLE LOCATION	COLLECTION		TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	DISINFECTION			Field pH	Metals	Turbidity	Conductivity	Temperature	EPA 8260B	8260 Dup. 1	8260 Dup. 2	CHLORINE NEUTRALIZED AT COLLECTION	PH CHECK (LAB)	CONTAINER TYPE, PKG	CHEMICAL PRESERVATION
	DATE	TIME				CHLORINE	UV	NONE												
CSW-1					6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>												
SW-2					5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>												
SW-3	10/27/11	12:15		21	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>												
SW-4					6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>												
RELINQUISHED BY (SIG.) (SAMPLER)		DATE/TIME	RECEIVED BY (SIG.)																	
		10/27/11																		
RELINQUISHED BY (SIG.)		DATE/TIME	RECEIVED BY (SIG.)																	
		10/27/2010																		
RELINQUISHED BY (SIG.)		DATE/TIME	RECEIVED BY (SIG.)																	

PARAMETERS
 A - NONE D - NaOH
 B - HNO₃ E - HCL
 C - H₂SO₄ F - ZINC ACETATE
 G - NA THIOSULFATE

CLASSIFICATION:
 WASTEWATER (NPDES)
 DRINKING WATER
 DWOGW
 SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY
 Y N

SAMPLES COLLECTED BY: (Please Print)
 J. J. J. / J. J. J.

SAMPLES RECEIVED IN LAB AT: 0.20

COMMENTS:

SW 1, SW 2, SW 4 Dry

PLEASE READ Instructions for completing this form on the reverse side.

Environment 1, Incorporated

PRINTED WATER QUALITY REPORT
 MATERIAL ID: 10

P.O. BOX 7085, 114 OAKMONT DRIVE
 GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
 FAX (252) 756-0633

ID#: 6040 C

HARNETT CO. (DUNN/ERWIN)
 GENERAL SERVICES HARNETT CO.
 MR. JERRY BLANCHARD, MANAGER
 900 SOUTH 9TH STREET
 LILLINGTON, NC 27546

DATE COLLECTED: 10/27/11
 DATE REPORTED : 11/08/11

REVIEWED BY: 

PARAMETERS	MDL	SWBL	MW-16	MW-32	MW-33	MW23-B	MW-34	Analysis		Method
								Date	Analyst	Code
PH (field measurement), Units			6.1	5.7	5.2	5.4	5.7	10/27/11	RJK	SM4500B
Arsenic, ug/l	0.10	10.0	0.34 J	0.44 J	0.51 J	---	---	11/07/11	LFJ	EPA200.8
Barium, ug/l	0.02	100.0	56.4 J	29.0 J	47.6 J	59.1 J	38.0 J	11/07/11	LFJ	EPA200.8
Cadmium, ug/l	0.02	1.0	0.23 J	0.09 J	0.09 J	0.15 J	0.48 J	11/07/11	LFJ	EPA200.8
Total Chromium, ug/l	0.04	10.0	0.20 J	2.3 J	---	---	---	11/07/11	LFJ	EPA200.8
Lead, ug/l	0.02	10.0	0.49 J	2.9 J	0.26 J	0.78 J	1.0 J	11/07/11	LFJ	EPA200.8
Mercury, ug/l	0.05	0.20	---	---	---	---	---	11/07/11	LFJ	EPA200.8
Selenium, ug/l	0.20	10.0	0.67 J	---	---	---	---	11/07/11	LFJ	EPA200.8
Silver, ug/l	0.02	10.0	---	---	---	0.05 J	---	11/07/11	LFJ	EPA200.8
Turbidity, NTU	1.0	1.0	28	190	14	45	7.8	10/27/11	MEL	SM2130B
Conductivity (at 25c), uMhos/cm	1.0	1.0	125	48	72	46	82	10/27/11	RJK	SM2510B
Temperature, °C			21	20	20	20	20	10/27/11	RJK	SM2550B
Static Water Level, feet			7.38	3.27	10.69	9.47	2.78	10/27/11	RJK	
Well Depth, feet			45.23	24.55	26.43	24.55	40.23	10/27/11	RJK	
Water Bailed, Gals.			18.3	10.2	7.2	7.2	18.3	10/27/11	RJK	

J = Between MDL and SWBL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6040 C

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

DATE COLLECTED: 10/27/11
DATE REPORTED: 11/08/11

REVIEWED BY: 

PARAMETERS	MDL	MN-35 SWSL	Analysis		Method Code
			Date	Analyst	
PK (field measurement), Units			5.7	10/27/11 RJH	SM4500HB
Arsenic, ug/l	0.10	10.0	0.89 J	11/07/11 LFFJ	EPA200.8
Barium, ug/l	0.02	100.0	535	11/07/11 LFFJ	EPA200.8
Cadmium, ug/l	0.02	1.0	0.06 J	11/07/11 LFFJ	EPA200.8
Total Chromium, ug/l	0.04	10.0	0.24 J	11/07/11 LFFJ	EPA200.8
Lead, ug/l	0.02	10.0	0.90 J	11/07/11 LFFJ	EPA200.8
Mercury, ug/l	0.05	0.20	--- U	11/07/11 LFFJ	EPA200.8
Selenium, ug/l	0.20	10.0	0.68 J	11/07/11 LFFJ	EPA200.8
Silver, ug/l	0.02	10.0	--- U	11/07/11 LFFJ	EPA200.8
Turbidity, NTU	1.0	1.0	33	10/27/11 MEL	SM2130B
Conductivity (at 25c), uMhos/cm	1.0	1.0	935	10/27/11 RJH	SM2510B
Temperature, °C			19	10/27/11 RJH	SM2550B
Static Water Level, feet			5.37	10/27/11 RJH	
Well Depth, feet			22.15	10/27/11 RJH	
Water Hailed, Gals.			7.8	10/27/11 RJH	

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

LABORATORY REPORT ID: 3718
 REPORT NUMBER ID: 10

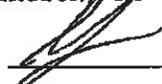
P.O. BOX 7085, 114 OAKMONT DRIVE
 GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
 FAX (252) 756-0633

CLIENT: HARNETT CO. (DUNN/ERWIN)
 GENERAL SERVICES HARNETT CO.
 MR. JERRY BLANCHARD, MANAGER
 900 SOUTH 9TH STREET
 LILLINGTON, NC 27546

CLIENT ID: 6040 C
 ANALYST: MAO
 DATE COLLECTED: 10/27/11
 DATE ANALYZED: 10/31/11
 DATE REPORTED: 11/08/11

Page: 1

REVIEWED BY: 

VOLATILE ORGANICS EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	MW-16	MW-32	MW-33	MW23-B	MW-34	
1. Chloromethane	0.77	1.0	---	U	---	U	---	U
2. Vinyl Chloride	0.63	1.0	---	U	---	U	---	U
3. Bromomethane	0.67	10.0	---	U	---	U	---	U
4. Chloroethane	0.48	10.0	---	U	---	U	---	U
5. Trichlorofluoromethane	0.24	1.0	---	U	---	U	---	U
6. 1,1-Dichloroethene	0.17	5.0	---	U	---	U	---	U
7. Acetone	9.06	100.0	---	U	---	U	---	U
8. Iodomethane	0.26	10.0	---	U	---	U	---	U
9. Carbon Disulfide	0.23	100.0	---	U	---	U	---	U
10. Methylene Chloride	0.64	1.0	---	U	---	U	---	U
11. trans-1,2-Dichloroethene	0.23	5.0	---	U	---	U	---	U
12. 1,1-Dichloroethane	0.20	5.0	---	U	0.40	J	---	U
13. Vinyl Acetate	0.20	50.0	---	U	---	U	---	U
14. Cis-1,2-Dichloroethene	0.25	5.0	---	U	1.20	J	---	U
15. 2-Butanone	2.21	100.0	---	U	---	U	---	U
16. Bromochloromethane	0.27	3.0	---	U	---	U	---	U
17. Chloroform	0.25	5.0	---	U	---	U	---	U
18. 1,1,1-Trichloroethane	0.19	1.0	---	U	---	U	---	U
19. Carbon Tetrachloride	0.22	1.0	---	U	---	U	---	U
20. Benzene	0.24	1.0	---	U	---	U	---	U
21. 1,2-Dichloroethane	0.27	1.0	---	U	---	U	---	U
22. Trichloroethene	0.23	1.0	---	U	---	U	---	U
23. 1,2-Dichloropropane	0.21	1.0	---	U	---	U	---	U
24. Bromodichloromethane	0.21	1.0	---	U	---	U	---	U
25. Cis-1,3-Dichloropropane	0.24	1.0	---	U	---	U	---	U
26. 4-Methyl-2-Pentanone	1.19	100.0	---	U	---	U	---	U
27. Toluene	0.23	1.0	---	U	---	U	---	U
28. trans-1,3-Dichloropropane	0.28	1.0	---	U	---	U	---	U
29. 1,1,2-Trichloroethane	0.25	1.0	---	U	---	U	---	U
30. Tetrachloroethane	0.17	1.0	---	U	---	U	---	U
31. 2-Hexanone	1.57	50.0	---	U	---	U	---	U
32. Dibromochloromethane	0.24	3.0	---	U	---	U	---	U
33. 1,2-Dibromoethane	0.26	1.0	---	U	---	U	---	U
34. Chlorobenzene	0.30	3.0	---	U	---	U	---	U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	---	U	---	U	---	U
36. Ethylbenzene	0.21	1.0	---	U	---	U	---	U
37. Xylenes	0.68	5.0	---	U	---	U	---	U
38. Dibromomethane	0.28	10.0	---	U	---	U	---	U
39. Styrene	0.19	1.0	---	U	---	U	---	U
40. Bromoform	0.20	3.0	---	U	---	U	---	U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	---	U	---	U	---	U
42. 1,2,3-Trichloropropane	0.43	1.0	---	U	---	U	---	U
43. 1,4-Dichlorobenzene	0.39	1.0	---	U	---	U	---	U
44. 1,2-Dichlorobenzene	0.32	5.0	---	U	---	U	---	U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	---	U	---	U	---	U
46. Acrylonitrile	2.72	200.0	---	U	---	U	---	U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	---	U	---	U	---	U

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

DUPLICATE PAGE 30 1118

MANUSCRIPT 101 10

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

CLIENT ID: 6040 C

ANALYST: MAO
DATE COLLECTED: 10/27/11
DATE ANALYZED: 10/31/11
DATE REPORTED: 11/08/11

Page: 2

REVIEWED BY: 

VOLATILE ORGANICS EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	MW-35
1. Chloromethane	0.77	1.0	--- U
2. Vinyl Chloride	0.63	1.0	--- U
3. Bromomethane	0.67	10.0	--- U
4. Chloroethane	0.48	10.0	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U
7. Acetone	9.06	100.0	--- U
8. Iodomethane	0.26	10.0	--- U
9. Carbon Disulfide	0.23	100.0	--- U
10. Methylene Chloride	0.64	1.0	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U
13. Vinyl Acetate	0.20	50.0	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U
15. 2-Butanone	2.21	100.0	--- U
16. Bromochloromethane	0.27	3.0	--- U
17. Chloroform	0.25	5.0	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U
20. Benzene	0.24	1.0	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U
22. Trichloroethene	0.23	1.0	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U
24. Bromodichloromethane	0.21	1.0	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U
27. Toluene	0.23	1.0	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U
30. Tetrachloroethene	0.17	1.0	--- U
31. 2-Hexanone	1.57	50.0	--- U
32. Dibromochloromethane	0.24	3.0	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U
34. Chlorobenzene	0.30	3.0	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U
36. Ethylbenzene	0.21	1.0	--- U
37. Xylenes	0.68	5.0	--- U
38. Dibromomethane	0.28	10.0	--- U
39. Styrene	0.19	1.0	--- U
40. Bromoform	0.20	3.0	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U
46. Acrylonitrile	2.72	200.0	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U

U = Between MDL and SWSL, V = Below ALL Quantitation Limits.

Environment 1, Inc.
 P.O. Box 7085, 114 Oakmont Dr.
 Greenville, NC 27858

CHAIN OF CUSTODY RECORD

Phone (252) 756-6208 • Fax (252) 756-0633

CLIENT: 6040 C Week: 43

HARNETT CO. (DUNN/ERWIN)
 GENERAL SERVICES HARNETT CO.
 MR. JERRY BLANCHARD, MANAGER
 900 SOUTH 9TH STREET
 LILLINGTON NC 27546

(919) 233-0407

SAMPLE LOCATION	COLLECTION		TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	DISINFECTION			Field pH	Metals	Turbidity	Conductivity	Temperature	Field Parameter	EPA 8260B	8260 Dup. 1	8260 Dup. 2	PARAMETERS	CLASSIFICATION:	
	DATE	TIME				CHLORINE	UV	NONE												
MW-16	10/22/11	1145		21	6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										A-NONE D-NAOH B-HNO ₃ E-HCL C-H ₂ SO ₄ F-ZINCACETATE G-NATHTIOSULFATE	WASTEWATER (NPDES) DRINKING WATER DMO/GW SOLID WASTE SECTION	
MW-32	10/27/11	1135		20	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY	
MW-33	10/27/11	1135		20	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											SAMPLES COLLECTED BY: Moore For	
MW-23-B	10/27/11	1220		20	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>											SAMPLES RECEIVED IN LAB AT 0:20	
MW-34	10/27/11	1200		20	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>												
MW-35	10/27/11	1145		20	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>												
RELINQUISHED BY (SIG.)	DATE/TIME	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME
<i>[Signature]</i>			<i>[Signature]</i>			<i>[Signature]</i>														
RELINQUISHED BY (SIG.)	DATE/TIME	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME
<i>[Signature]</i>			<i>[Signature]</i>			<i>[Signature]</i>														
RELINQUISHED BY (SIG.)	DATE/TIME	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME
<i>[Signature]</i>			<i>[Signature]</i>			<i>[Signature]</i>														

PLEASE READ Instructions for completing this form on the reverse side.

FORM #5

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.
 No 231209

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6040 D

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

DATE COLLECTED: 10/27/11
DATE REPORTED : 11/17/11

REVIEWED BY: 

PARAMETERS	MDL	SWSL	MW-1	MW-2	MW-3R	MW-4	MW-5	Analysis		Method Code
								Date	Analyst	
PH (field measurement), Units			5.7	4.8	5.2	4.7	6.4	10/27/11	RJH	SM4500HB
Antimony, ug/l	0.14	6.0	0.34 J	---	---	---	---	11/07/11	LFJ	EPA200.8
Antimony, ug/l	0.14	6.0				---	0.19 J	11/10/11	CMF	EPA200.8
Arsenic, ug/l	0.10	10.0	0.20 J	---	---	---	---	11/07/11	LFJ	EPA200.8
Arsenic, ug/l	0.10	10.0				0.33 J	0.26 J	11/10/11	CMF	EPA200.8
Barium, ug/l	0.02	100.0	25.9 J	49.9 J	73.7 J	---	---	11/07/11	LFJ	EPA200.8
Barium, ug/l	0.02	100.0				56.9 J	101	11/10/11	CMF	EPA200.8
Beryllium, ug/l	0.02	1.0	0.72 J	2	3	---	---	11/07/11	LFJ	EPA200.8
Beryllium, ug/l	0.02	1.0				3	0.20 J	11/10/11	CMF	EPA200.8
Cadmium, ug/l	0.02	1.0	0.13 J	0.15 J	0.06 J	---	---	11/07/11	LFJ	EPA200.8
Cadmium, ug/l	0.02	1.0				0.12 J	0.15 J	11/10/11	CMF	EPA200.8
Cobalt, ug/l	0.03	10.0	0.37 J	1.2 J	3.0 J	---	---	11/07/11	LFJ	EPA200.8
Cobalt, ug/l	0.03	10.0				2.0 J	2.2 J	11/10/11	CMF	EPA200.8
Copper, ug/l	0.02	10.0	1.7 J	1.1 J	0.59 J	---	---	11/07/11	LFJ	EPA200.8
Copper, ug/l	0.02	10.0				2.3 J	1.5 J	11/10/11	CMF	EPA200.8
Total Chromium, ug/l	0.04	10.0	---	---	---	---	---	11/07/11	LFJ	EPA200.8
Total Chromium, ug/l	0.04	10.0				---	---	11/10/11	CMF	EPA200.8
Lead, ug/l	0.02	10.0	0.15 J	0.57 J	0.07 J	---	---	11/07/11	LFJ	EPA200.8
Lead, ug/l	0.02	10.0				0.47 J	0.12 J	11/10/11	CMF	EPA200.8
Nickel, ug/l	0.04	50.0	1.1 J	1.7 J	3.3 J	---	---	11/07/11	LFJ	EPA200.8
Nickel, ug/l	0.04	50.0				2.2 J	2.3 J	11/10/11	CMF	EPA200.8
Selenium, ug/l	0.20	10.0	---	---	---	---	---	11/07/11	LFJ	EPA200.8
Selenium, ug/l	0.20	10.0				0.22 J	---	11/10/11	CMF	EPA200.8
Silver, ug/l	0.02	10.0	0.10 J	---	---	---	---	11/07/11	LFJ	EPA200.8
Silver, ug/l	0.02	10.0				0.10 J	---	11/10/11	CMF	EPA200.8
Thallium, ug/l	0.02	5.5	0.08 J	---	---	---	---	11/07/11	LFJ	EPA200.8
Thallium, ug/l	0.02	5.5				0.32 J	0.21 J	11/10/11	CMF	EPA200.8
Vanadium, ug/l	0.14	25.0	0.32 J	0.89 J	0.33 J	---	---	11/07/11	LFJ	EPA200.8
Vanadium, ug/l	0.14	25.0				0.62 J	0.30 J	11/10/11	CMF	EPA200.8
Zinc, ug/l	0.24	10.0	3.3 J	18	11	---	---	11/07/11	LFJ	EPA200.8
Zinc, ug/l	0.24	10.0				24	5.0 J	11/10/11	CMF	EPA200.8
Turbidity, NTU	1.0	1.0	7.2	21	3.7	8.5	9.5	10/27/11	NEL	SM2130B
Conductivity (at 25c), uMhos/cm	1.0	1.0	60	87	135	68	162	10/27/11	RJH	SM2510B
Temperature, °C			19	20	20	22	22	10/27/11	RJH	SM2550B
Static Water Level, feet			26.03	17.32	4.99	7.04	12.75	10/27/11	RJH	
Well Depth, feet			65.18	30.21	25.12	25.21	40.14	10/27/11	RJH	
Water Bailed, Gals.			19.2	6.0	9.6	8.7	10.2	10/27/11	RJH	

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6040 D

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

DATE COLLECTED: 10/27/11
DATE REPORTED: 11/17/11

REVIEWED BY: 

PARAMETERS	MDL	SWSL	MW-31	Equipment	Trip	Analysis		Method
				Blank	Blank	Date	Analyst	Code
PH (field measurement), Units			5.4			10/27/11	RJH	SM4500NB
Antimony, ug/l	0.14	6.0	---	U	0.18 J	11/10/11	CMF	EPA200.8
Arsenic, ug/l	0.10	10.0	3.0 J		---	11/10/11	CMF	EPA200.8
Barium, ug/l	0.02	100.0	22.3 J		0.08 J	11/10/11	CMF	EPA200.8
Beryllium, ug/l	0.02	1.0	0.31 J		---	11/10/11	CMF	EPA200.8
Cadmium, ug/l	0.02	1.0	0.59 J		---	11/10/11	CMF	EPA200.8
Cobalt, ug/l	0.03	10.0	0.46 J		---	11/10/11	CMF	EPA200.8
Copper, ug/l	0.02	10.0	5.5 J		0.39 J	11/10/11	CMF	EPA200.8
Total Chromium, ug/l	0.04	10.0	8.0 J		---	11/10/11	CMF	EPA200.8
Lead, ug/l	0.02	10.0	8.7 J		---	11/10/11	CMF	EPA200.8
Nickel, ug/l	0.04	50.0	9.1 J		0.36 J	11/10/11	CMF	EPA200.8
Selenium, ug/l	0.20	10.0	---	U	---	11/10/11	CMF	EPA200.8
Silver, ug/l	0.02	10.0	---	U	---	11/10/11	CMF	EPA200.8
Thallium, ug/l	0.02	5.5	0.11 J		0.04 J	11/10/11	CMF	EPA200.8
Vanadium, ug/l	0.14	25.0	17.2 J		---	11/10/11	CMF	EPA200.8
Zinc, ug/l	0.24	10.0	5.9 J		2.0 J	11/10/11	CMF	EPA200.8
Turbidity, NTU	1.0	1.0	650			10/27/11	MSL	SM2130B
Conductivity (at 25c), uMhos/cm	1.0	1.0	25			10/27/11	RJH	SM2510B
Temperature, °C			20			10/27/11	RJH	SM2550B
Static Water Level, feet			24.11			10/27/11	RJH	
Well Depth, feet			39.33			10/27/11	RJH	
Water Bailed, Gals.			7.2			10/27/11	RJH	

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
 LABORATORY OF ENVIRONMENTAL CHEMISTRY

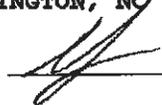
P.O. BOX 7085, 114 OAKMONT DRIVE
 GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
 FAX (252) 756-0633

CLIENT: HARNETT CO. (DUNN/ERWIN)
 GENERAL SERVICES HARNETT CO.
 MR. JERRY BLANCHARD, MANAGER
 900 SOUTH 9TH STREET
 LILLINGTON, NC 27546

CLIENT ID: 6040 D
 ANALYST: MAO
 DATE COLLECTED: 10/27/11
 DATE ANALYZED: 10/31/11
 DATE REPORTED: 11/17/11

Page: 1

REVIEWED BY: 

VOLATILE ORGANICS EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	Equipment Blank
1. Chloromethane	0.77	1.0	--- U
2. Vinyl Chloride	0.63	1.0	--- U
3. Bromomethane	0.67	10.0	--- U
4. Chloroethane	0.48	10.0	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U
7. Acetone	9.06	100.0	--- U
8. Iodomethane	0.26	10.0	--- U
9. Carbon Disulfide	0.23	100.0	--- U
10. Methylene Chloride	0.64	1.0	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U
13. Vinyl Acetate	0.20	50.0	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U
15. 2-Butanone	2.21	100.0	--- U
16. Bromochloromethane	0.27	3.0	--- U
17. Chloroform	0.25	5.0	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U
20. Benzene	0.24	1.0	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U
22. Trichloroethene	0.23	1.0	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U
24. Bromodichloromethane	0.21	1.0	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U
27. Toluene	0.23	1.0	--- U
28. trans-1,3-Dichloropropene	0.20	1.0	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U
30. Tetrachloroethene	0.17	1.0	--- U
31. 2-Hexanone	1.57	50.0	--- U
32. Dibromochloromethane	0.24	3.0	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U
34. Chlorobenzene	0.30	3.0	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U
36. Ethylbenzene	0.21	1.0	--- U
37. Xylenes	0.68	5.0	--- U
38. Dibromomethane	0.28	10.0	--- U
39. Styrene	0.19	1.0	--- U
40. Bromoform	0.20	3.0	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U
46. Acrylonitrile	2.72	200.0	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

CLIENT ID: 6040 D
ANALYST: MAO
DATE COLLECTED: 10/27/11
DATE REPORTED: 11/17/11

Page: 1

REVIEWED BY: 

VOLATILE ORGANICS EPA METHOD 8260B

PARAMETERS, ug/l	Date Analyzed:		11/01/11	11/01/11	11/01/11	11/01/11	11/03/11
	MDL	SWSL	MW-1	MW-2	MW-3R	MW-4	MW-5
1. Chloromethane	0.77	1.0	--- U				
2. Vinyl Chloride	0.63	1.0	--- U				
3. Bromomethane	0.67	10.0	--- U				
4. Chloroethane	0.48	10.0	--- U				
5. Trichlorofluoromethane	0.24	1.0	--- U				
6. 1,1-Dichloroethane	0.17	5.0	--- U				
7. Acetone	9.06	100.0	--- U				
8. Iodomethane	0.26	10.0	--- U				
9. Carbon Disulfide	0.23	100.0	--- U				
10. Methylene Chloride	0.64	1.0	--- U				
11. trans-1,2-Dichloroethane	0.23	5.0	--- U				
12. 1,1-Dichloroethane	0.20	5.0	--- U	0.20 J	--- U	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U				
14. Cis-1,2-Dichloroethane	0.25	5.0	--- U				
15. 2-Butanone	2.21	100.0	--- U				
16. Bromochloromethane	0.27	3.0	--- U				
17. Chloroform	0.25	5.0	--- U				
18. 1,1,1-Trichloroethane	0.19	1.0	--- U				
19. Carbon Tetrachloride	0.22	1.0	--- U				
20. Benzene	0.24	1.0	--- U				
21. 1,2-Dichloroethane	0.27	1.0	--- U				
22. Trichloroethane	0.23	1.0	--- U				
23. 1,2-Dichloropropane	0.21	1.0	--- U				
24. Bromodichloromethane	0.21	1.0	--- U				
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U				
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U				
27. Toluene	0.23	1.0	--- U	--- U	--- U	1.1 U	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U				
29. 1,1,2-Trichloroethane	0.25	1.0	--- U				
30. Tetrachloroethene	0.17	1.0	--- U				
31. 2-Hexanone	1.57	50.0	--- U				
32. Dibromochloromethane	0.24	3.0	--- U				
33. 1,2-Dibromoethane	0.26	1.0	--- U				
34. Chlorobenzene	0.30	3.0	--- U				
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U				
36. Ethylbenzene	0.21	1.0	--- U				
37. Xylenes	0.68	5.0	--- U				
38. Dibromomethane	0.28	10.0	--- U				
39. Styrene	0.19	1.0	--- U				
40. Bromoform	0.20	3.0	--- U				
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U				
42. 1,2,3-Trichloropropane	0.43	1.0	--- U				
43. 1,4-Dichlorobenzene	0.39	1.0	--- U				
44. 1,2-Dichlorobenzene	0.32	5.0	--- U				
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U				
46. Acrylonitrile	2.72	200.0	--- U				
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U				

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0638

CLIENT: HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

CLIENT ID: 6040 D
ANALYST: MAO
DATE COLLECTED: 10/27/11
DATE REPORTED: 11/17/11

Page: 2

REVIEWED BY: 

VOLATILE ORGANICS EPA METHOD 8260B

PARAMETERS, ug/l	Date Analyzed:		11/01/11	11/01/11	11/01/11	11/01/11	11/03/11
	MDL	SWSL	NW-1	NW-2	NW-3R	NW-4	NW-5
46. Tetrahydrofuran	0.39	1.0	--- U				

Environment 1, Incorporated

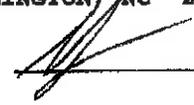
P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0683

CLIENT: HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

CLIENT ID: 6040 D
ANALYST: MAO
DATE COLLECTED: 10/27/11
DATE REPORTED: 11/17/11

Page: 3

REVIEWED BY: 

VOLATILE ORGANICS EPA METHOD 8260B

PARAMETERS, ug/l	Date Analyzed:		11/03/11	11/04/11
	MDL	SWSL	MW-31	Trip Blank
1. Chloromethane	0.77	1.0	--- U	--- U
2. Vinyl Chloride	0.63	1.0	--- U	--- U
3. Bromomethane	0.67	10.0	--- U	--- U
4. Chloroethane	0.48	10.0	--- U	--- U
5. Trichlorofluoromethane	0.24	1.0	--- U	--- U
6. 1,1-Dichloroethene	0.17	5.0	--- U	--- U
7. Acetone	9.06	100.0	--- U	--- U
8. Iodomethane	0.26	10.0	--- U	--- U
9. Carbon Disulfide	0.23	100.0	--- U	--- U
10. Methylene Chloride	0.64	1.0	--- U	--- U
11. trans-1,2-Dichloroethene	0.23	5.0	--- U	--- U
12. 1,1-Dichloroethane	0.20	5.0	--- U	--- U
13. Vinyl Acetate	0.20	50.0	--- U	--- U
14. Cis-1,2-Dichloroethene	0.25	5.0	--- U	--- U
15. 2-Butanone	2.21	100.0	--- U	--- U
16. Bromochloromethane	0.27	3.0	--- U	--- U
17. Chloroform	0.26	5.0	--- U	--- U
18. 1,1,1-Trichloroethane	0.19	1.0	--- U	--- U
19. Carbon Tetrachloride	0.22	1.0	--- U	--- U
20. Benzene	0.24	1.0	--- U	--- U
21. 1,2-Dichloroethane	0.27	1.0	--- U	--- U
22. Trichloroethane	0.23	1.0	--- U	--- U
23. 1,2-Dichloropropane	0.21	1.0	--- U	--- U
24. Bromodichloromethane	0.21	1.0	--- U	--- U
25. Cis-1,3-Dichloropropene	0.24	1.0	--- U	--- U
26. 4-Methyl-2-Pentanone	1.19	100.0	--- U	--- U
27. Toluene	0.23	1.0	--- U	--- U
28. trans-1,3-Dichloropropene	0.28	1.0	--- U	--- U
29. 1,1,2-Trichloroethane	0.25	1.0	--- U	--- U
30. Tetrachloroethene	0.17	1.0	--- U	--- U
31. 2-Hexanone	1.57	50.0	--- U	--- U
32. Dibromochloromethane	0.24	3.0	--- U	--- U
33. 1,2-Dibromoethane	0.26	1.0	--- U	--- U
34. Chlorobenzene	0.30	3.0	--- U	--- U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	--- U	--- U
36. Ethylbenzene	0.21	1.0	--- U	--- U
37. Xylenes	0.68	5.0	--- U	--- U
38. Dibromomethane	0.28	10.0	--- U	--- U
39. Styrene	0.19	1.0	--- U	--- U
40. Bromoform	0.20	3.0	--- U	--- U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	--- U	--- U
42. 1,2,3-Trichloropropane	0.43	1.0	--- U	--- U
43. 1,4-Dichlorobenzene	0.39	1.0	--- U	--- U
44. 1,2-Dichlorobenzene	0.32	5.0	--- U	--- U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	--- U	--- U
46. Acrylonitrile	2.72	200.0	--- U	--- U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	--- U	--- U

U = Between MDL and SWSL, --- U = Below ALL Quantitation Limits.

Environment 1, Incorporated

DEPT. OF ENVIRONMENTAL & NATURAL RESOURCES
WATERWAYS DIVISION

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

CLIENT ID: 6040 D
ANALYST: MAO
DATE COLLECTED: 10/27/11
DATE REPORTED: 11/17/11

Page: 4

REVIEWED BY: 

VOLATILE ORGANICS EPA METHOD 8260B

PARAMETERS, ug/l	Date Analyzed:		11/03/11	11/04/11
	MDL	SWSL	MW-31	Trip Blank
49. Tetrahydrofuran	0.39	1.0	--- U	--- U

Environment 1, Inc.
 P.O. Box 7085, 114 Oakmont Dr.
 Greenville, NC 27858

CHAIN OF CUSTODY RECORD

Phone (252) 756-6208 • Fax (252) 756-0633

CLIENT: 6040 D Week: 43

HARNETT CO. (DUNN/KERWIN)
 GENERAL SERVICES HARNETT CO.
 MR. JERRY BLANCHARD, MANAGER
 900 SOUTH 9TH STREET
 LILLINGTON NC 27546

(919) 233-0407

SAMPLE LOCATION	COLLECTION		TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	DISINFECTION			Field pH	Metals	Turbidity	Conductivity	Temperature	Field Parameter	EPA 8260B	8260 Dup. 1	8260 Dup. 2	PARAMETERS	CLASSIFICATION:	CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY	SAMPLES COLLECTED BY: (Please Print)	SAMPLES RECEIVED IN LAB AT	
	DATE	TIME				CHLORINE	UV	NONE															
MW-1	10/27/11	11:20	19	19	6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										A - NONE D - NaOH B - HNO ₃ E - HCL C - H ₂ SO ₄ F - ZINC ACETATE G - NATHIOSULFATE	<input type="checkbox"/> WASTEWATER (NPDES) <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> DWQGW <input checked="" type="checkbox"/> SOLID WASTE SECTION				
MW-2	10/27/11	11:10	20	20	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>															
MW-3R	10/27/11	11:15	20	20	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>															
MW-4	10/27/11	11:30	22	22	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>															
MW-5	10/27/11	11:25	22	22	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>															
MW-31	10/27/11	10:55	20	20	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>															
Equipment Blank	10/27/11				3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>															
Trip Blank					2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>															
RELINQUISHED BY (SIG.)	DATE/TIME	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)
<i>Bob Lopez</i>	10/27/11		<i>[Signature]</i>	10/27/11	<i>[Signature]</i>	10/27/11	<i>[Signature]</i>	10/27/11	<i>[Signature]</i>	10/27/11	<i>[Signature]</i>	10/27/11	<i>[Signature]</i>	10/27/11	<i>[Signature]</i>	10/27/11	<i>[Signature]</i>	10/27/11	<i>[Signature]</i>	10/27/11	<i>[Signature]</i>	10/27/11	<i>[Signature]</i>
COMMENTS:																							
SAMPLER MUST PLACE A "C" FOR COMPOSITE SAMPLE OR A "G" FOR GRAB SAMPLE IN THE BLOCKS ABOVE FOR EACH PARAMETER REQUESTED																							

PLEASE READ Instructions for completing this form on the reverse side.

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6040 F

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

DATE COLLECTED: 10/26/11
DATE REPORTED: 11/04/11

REVIEWED BY: 

PARAMETERS	MDL	SWSL	MW-11	MW-12	MW-13	MW-14	MW-15	Analysis	Method
								Data Analyst	Code
PH (field measurement), Units			5.0	4.8	6.3	5.8	Missing	10/26/11 RJH	SM4500B
Antimony, ug/l	0.14	6.0	0.20 J	0.15 J	--- U	--- U	Missing	11/03/11 CMF	EPA200.8
Arsenic, ug/l	0.10	10.0	0.19 J	0.84 J	0.25 J	0.64 J	Missing	11/03/11 CMF	EPA200.8
Barium, ug/l	0.02	100.0	40.8 J	66.8 J	92.2 J	66.9 J	Missing	11/03/11 CMF	EPA200.8
Beryllium, ug/l	0.02	1.0	0.26 J	3	0.32 J	5	Missing	11/03/11 CMF	EPA200.8
Cadmium, ug/l	0.02	1.0	1	0.35 J	0.22 J	0.30 J	Missing	11/03/11 CMF	EPA200.8
Cobalt, ug/l	0.03	10.0	0.68 J	1.3 J	2.1 J	1.3 J	Missing	11/03/11 CMF	EPA200.8
Copper, ug/l	0.02	10.0	4.4 J	9.4 J	1.5 J	4.9 J	Missing	11/03/11 CMF	EPA200.8
Total Chromium, ug/l	0.04	10.0	4.1 J	4.5 J	0.50 J	4.8 J	Missing	11/03/11 CMF	EPA200.8
Lead, ug/l	0.02	10.0	3.3 J	9.2 J	0.66 J	7.4 J	Missing	11/03/11 CMF	EPA200.8
Nickel, ug/l	0.04	50.0	1.3 J	2.2 J	1.5 J	2.7 J	Missing	11/03/11 CMF	EPA200.8
Selenium, ug/l	0.20	10.0	0.26 J	0.59 J	--- U	0.80 J	Missing	11/03/11 CMF	EPA200.8
Silver, ug/l	0.02	10.0	0.04 J	0.08 J	--- U	--- U	Missing	11/03/11 CMF	EPA200.8
Thallium, ug/l	0.02	5.5	0.06 J	0.04 J	--- U	0.03 J	Missing	11/03/11 CMF	EPA200.8
Vanadium, ug/l	0.14	25.0	6.2 J	14.5 J	1.1 J	18.3 J	Missing	11/03/11 CMF	EPA200.8
Zinc, ug/l	0.24	10.0	7.2 J	13	4.4 J	17	Missing	11/03/11 CMF	EPA200.8
Turbidity, NTU	1.0	1.0	190	500	27	450	Missing	10/27/11 MRL	SM2130B
Conductivity (at 25c), uMhos/cm	1.0	1.0	46	71	125	122	Missing	10/26/11 RJH	SM2510B
Temperature, °C			21	20	18	18	Missing	10/26/11 RJH	SM2550B
Static Water Level, feet			19.59	6.45	24.30	9.71	Missing	10/26/11 RJH	
Well Depth, feet			27.60	22.25	50.51	29.92	Missing	10/26/11 RJH	
Water Bailed, Gals.			3.9	7.2	12.6	9.6	Missing	10/26/11 RJH	

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

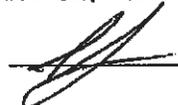
PO BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0638

CLIENT: HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

CLIENT ID: 6040 F
ANALYST: MAO
DATE COLLECTED: 10/26/11
DATE ANALYZED: 10/31/11
DATE REPORTED: 11/04/11

Page: 1

REVIEWED BY: 

VOLATILE ORGANICS EPA METHOD 8260B

PARAMETERS, ug/l	MDL	SWSL	MW-11	MW-12	MW-13	MW-14
1. Chloromethane	0.77	1.0	---	U	---	U
2. Vinyl Chloride	0.63	1.0	---	U	---	U
3. Bromomethane	0.67	10.0	---	U	---	U
4. Chloroethane	0.48	10.0	---	U	---	U
5. Trichlorofluoromethane	0.24	1.0	---	U	---	U
6. 1,1-Dichloroethane	0.17	5.0	---	U	---	U
7. Acetone	9.06	100.0	---	U	---	U
8. Iodomethane	0.26	10.0	---	U	---	U
9. Carbon Disulfide	0.23	100.0	---	U	---	U
10. Methylene Chloride	0.64	1.0	---	U	---	U
11. trans-1,2-Dichloroethene	0.23	5.0	---	U	---	U
12. 1,1-Dichloroethane	0.20	5.0	---	U	---	U
13. Vinyl Acetate	0.20	50.0	---	U	---	U
14. Cis-1,2-Dichloroethene	0.25	5.0	---	U	---	U
15. 2-Butanone	2.21	100.0	---	U	---	U
16. Bromochloromethane	0.27	3.0	---	U	---	U
17. Chloroform	0.25	5.0	---	U	---	U
18. 1,1,1-Trichloroethane	0.19	1.0	---	U	---	U
19. Carbon Tetrachloride	0.22	1.0	---	U	---	U
20. Benzene	0.24	1.0	---	U	---	U
21. 1,2-Dichloroethane	0.27	1.0	---	U	---	U
22. Trichloroethene	0.23	1.0	---	U	---	U
23. 1,2-Dichloropropane	0.21	1.0	---	U	---	U
24. Bromodichloromethane	0.21	1.0	---	U	---	U
25. Cis-1,3-Dichloropropene	0.24	1.0	---	U	---	U
26. 4-Methyl-2-Pentanone	1.19	100.0	---	U	---	U
27. Toluene	0.23	1.0	---	U	---	U
28. trans-1,3-Dichloropropene	0.28	1.0	---	U	---	U
29. 1,1,2-Trichloroethane	0.25	1.0	---	U	---	U
30. Tetrachloroethene	0.17	1.0	---	U	---	U
31. 2-Hexanone	1.57	50.0	---	U	---	U
32. Dibromochloromethane	0.24	3.0	---	U	---	U
33. 1,2-Dibromoethane	0.26	1.0	---	U	---	U
34. Chlorobenzene	0.30	3.0	---	U	---	U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	---	U	---	U
36. Ethylbenzene	0.21	1.0	---	U	---	U
37. Xylenes	0.68	5.0	---	U	---	U
38. Dibromomethane	0.28	10.0	---	U	---	U
39. Styrene	0.19	1.0	---	U	---	U
40. Bromoform	0.20	3.0	---	U	---	U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	---	U	---	U
42. 1,2,3-Trichloropropane	0.43	1.0	---	U	---	U
43. 1,4-Dichlorobenzene	0.39	1.0	---	U	---	U
44. 1,2-Dichlorobenzene	0.32	5.0	---	U	---	U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	---	U	---	U
46. Acrylonitrile	2.72	200.0	---	U	---	U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	---	U	---	U
48. Tetrahydrofuran	0.39	1.0	---	U	---	U

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Inc.
 P.O. Box 7085, 114 Oakmont Dr.
 Greenville, NC 27858

Phone (252) 756-6208 • Fax (252) 756-0633

CLIENT: 6040 F Week: 43

HARNETT CO. (DUNN/RWIN)
 GENERAL SERVICES HARNETT CO.
 MR. JERRY BLANCHARD, MANAGER
 900 SOUTH 9TH STREET
 LILLINGTON NC 27546

(919) 233-0407

CHAIN OF CUSTODY RECORD

SAMPLE LOCATION	COLLECTION		TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	DISINFECTION			Field pH	Metals	Turbidity	Conductivity	Temperature	Field Parameter	EPA 8260B	8260 Dup. 1	8260 Dup. 2	CHLORINE NEUTRALIZED AT COLLECTION	pH CHECK (LAB)	CONTAINER TYPE, PIG	CHEMICAL PRESERVATION	
	DATE	TIME				<input type="checkbox"/> CHLORINE	<input type="checkbox"/> UV	<input type="checkbox"/> NONE														
MW-11	10	26 11 1825	21	6																		
MW-12	12	26 11 1820	20	5																		
MW-13	10	26 11 1250	18	5																		
MW-14	12	26 11 1250	18	5																		
MW-15				5																		
REINQUISHED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	RECEIVED BY (SIG.)
COMMENTS: MW 15 DRG																						
CLASSIFICATION: <input type="checkbox"/> WASTEWATER (NPDES) <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> DMCGW <input checked="" type="checkbox"/> SOLID WASTE SECTION																						
CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY SAMPLES COLLECTED BY: (Please Print) H. Dore / fot SAMPLES RECEIVED IN LAB AT: GS																						

FORM #5

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested. No 231204

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

ID#: 6040 G

HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

DATE COLLECTED: 10/27/11
DATE REPORTED : 11/17/11

REVIEWED BY: 

PARAMETERS	MDL	SWSL	MW-53	MW-56	MW-57	MW-58	MW-59	Analysis		Method Code
								Date	Analyst	
PH (field measurement), Units			5.3	5.0	4.4	5.6	4.8	10/27/11	RJH	SM4500HB
Antimony, ug/l	0.14	5.0	---	---	---	---	---	11/10/11	CMF	EPA200.8
Arsenic, ug/l	0.10	10.0	2.8 J	2.9 J	3.0 J	1.6 J	6.2 J	11/10/11	CMF	EPA200.8
Barium, ug/l	0.02	100.0	34.1 J	66.6 J	121	60.1 J	96.3 J	11/10/11	CMF	EPA200.8
Beryllium, ug/l	0.02	1.0	0.12 J	0.65 J	2	0.24 J	2	11/10/11	CMF	EPA200.8
Cadmium, ug/l	0.02	1.0	0.08 J	0.30 J	0.12 J	0.07 J	0.22 J	11/10/11	CMF	EPA200.8
Cobalt, ug/l	0.03	10.0	1.7 J	1.3 J	2.8 J	1.5 J	2.9 J	11/10/11	CMF	EPA200.8
Copper, ug/l	0.02	10.0	1.4 J	6.5 J	6.6 J	9.1 J	34	11/10/11	CMF	EPA200.8
Total Chromium, ug/l	0.04	10.0	---	4.7 J	11	16	12	11/10/11	CMF	EPA200.8
Lead, ug/l	0.02	10.0	0.93 J	12	16	14	29	11/10/11	CMF	EPA200.8
Nickel, ug/l	0.04	50.0	1.5 J	1.8 J	2.8 J	3.5 J	3.3 J	11/10/11	CMF	EPA200.8
Selenium, ug/l	0.20	10.0	0.38 J	0.21 J	0.89 J	0.25 J	1.4 J	11/10/11	CMF	EPA200.8
Silver, ug/l	0.02	10.0	---	0.04 J	0.10 J	---	0.08 J	11/10/11	CMF	EPA200.8
Thallium, ug/l	0.02	5.5	0.04 J	0.07 J	0.10 J	0.14 J	0.11 J	11/10/11	CMF	EPA200.8
Vanadium, ug/l	0.14	25.0	1.2 J	13.6 J	34	18.4 J	35	11/10/11	CMF	EPA200.8
Zinc, ug/l	0.24	10.0	6.0 J	15	12	8.5 J	14	11/10/11	CMF	EPA200.8
Turbidity, NTU	1.0	1.0	90	400	950	700	1600	10/27/11	MEL	SM2130B
Conductivity (at 25c), uMhos/cm	1.0	1.0	109	85	184	76	120	10/27/11	RJH	SM2510B
Temperature, °C			22	21	23	20	23	10/27/11	RJH	SM2550B
Static Water Level, feet			14.35	7.17	6.55	10.11	10.44	10/27/11	RJH	
Well Depth, feet			18.09	17.10	17.11	18.08	18.04	10/27/11	RJH	
Water Bailed, Gals.			1.5	4.3	4.8	3.6	3.6	10/27/11	RJH	

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

CLIENT ID: 6040 G
ANALYST: MAO
DATE COLLECTED: 10/27/11
DATE REPORTED: 11/17/11

Page: 1

REVIEWED BY: 

VOLATILE ORGANICS EPA METHOD 8260B

PARAMETERS, ug/l	Date Analyzed:		11/03/11	11/04/11	11/04/11	11/04/11	11/04/11		
	MDL	SWSL	MW-53	MW-56	MW-57	MW-58	MW-59		
1. Chloromethane	0.77	1.0	---	U	---	U	---	U	
2. Vinyl Chloride	0.63	1.0	2.10	---	U	---	U	1.00	
3. Bromomethane	0.67	10.0	---	U	---	U	---	U	
4. Chloroethane	0.48	10.0	0.60 J	---	U	0.50 J	---	U	
5. Trichlorofluoromethane	0.24	1.0	---	U	---	U	---	U	
6. 1,1-Dichloroethene	0.17	5.0	---	U	---	U	---	U	
7. Acetone	9.06	100.0	---	U	---	U	---	U	
8. Iodomethane	0.26	10.0	---	U	---	U	---	U	
9. Carbon Disulfide	0.23	100.0	---	U	---	U	---	U	
10. Methylene Chloride	0.64	1.0	1.50	---	U	1.60	---	U	
11. trans-1,2-Dichloroethene	0.23	5.0	---	U	---	U	---	U	
12. 1,1-Dichloroethane	0.20	5.0	9.80	---	U	4.20 J	1.80 J	0.70 J	
13. Vinyl Acetate	0.20	50.0	---	U	---	U	---	U	
14. Cis-1,2-Dichloroethene	0.25	5.0	6.50	---	U	4.30 J	---	3.70 J	
15. 2-Butanone	2.21	100.0	---	U	---	U	---	U	
16. Bromochloromethane	0.27	3.0	---	U	---	U	---	U	
17. Chloroform	0.25	5.0	---	U	---	U	---	U	
18. 1,1,1-Trichloroethane	0.19	1.0	---	U	---	U	---	U	
19. Carbon Tetrachloride	0.22	1.0	---	U	---	U	---	U	
20. Benzene	0.24	1.0	3.40	---	U	0.90 J	---	1.00	
21. 1,2-Dichloroethane	0.27	1.0	---	U	---	U	---	U	
22. Trichloroethene	0.23	1.0	1.10	---	U	0.70 J	---	0.40 J	
23. 1,2-Dichloropropane	0.21	1.0	---	U	---	U	---	U	
24. Bromodichloromethane	0.21	1.0	---	U	---	U	---	U	
25. Cis-1,3-Dichloropropene	0.24	1.0	---	U	---	U	---	U	
26. 4-Methyl-2-Pentanone	1.19	100.0	---	U	---	U	---	U	
27. Toluene	0.23	1.0	---	U	---	U	---	U	
28. trans-1,3-Dichloropropene	0.28	1.0	---	U	---	U	---	U	
29. 1,1,2-Trichloroethane	0.25	1.0	---	U	---	U	---	U	
30. Tetrachloroethene	0.17	1.0	0.90 J	---	U	0.30 J	0.20 J	---	U
31. 2-Hexanone	1.57	50.0	---	U	---	U	---	U	
32. Dibromochloromethane	0.24	3.0	---	U	---	U	---	U	
33. 1,2-Dibromoethane	0.26	1.0	---	U	---	U	---	U	
34. Chlorobenzene	0.30	3.0	0.50 J	---	U	---	---	---	U
35. 1,1,1,2-Tetrachloroethane	0.22	5.0	---	U	---	U	---	---	U
36. Ethylbenzene	0.21	1.0	---	U	---	U	---	---	U
37. Xylenes	0.68	5.0	---	U	---	U	---	---	U
38. Dibromomethane	0.28	10.0	---	U	---	U	---	---	U
39. Styrene	0.19	1.0	---	U	---	U	---	---	U
40. Bromoform	0.20	3.0	---	U	---	U	---	---	U
41. 1,1,2,2-Tetrachloroethane	0.26	3.0	---	U	---	U	---	---	U
42. 1,2,3-Trichloropropane	0.43	1.0	---	U	---	U	---	---	U
43. 1,4-Dichlorobenzene	0.39	1.0	2.90	---	U	0.60 J	---	---	U
44. 1,2-Dichlorobenzene	0.32	5.0	---	U	---	U	---	---	U
45. 1,2-Dibromo-3-Chloropropane	0.34	13.0	---	U	---	U	---	---	U
46. Acrylonitrile	2.72	200.0	---	U	---	U	---	---	U
47. trans-1,4-Dichloro-2-Butene	0.42	100.0	---	U	---	U	---	---	U

J = Between MDL and SWSL, U = Below ALL Quantitation Limits.

Environment 1, Incorporated

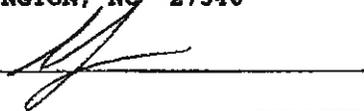
P.O. BOX 7085, 114 OAKMONT DRIVE
GREENVILLE, N.C. 27835-7085

PHONE (252) 756-6208
FAX (252) 756-0633

CLIENT: HARNETT CO. (DUNN/ERWIN)
GENERAL SERVICES HARNETT CO.
MR. JERRY BLANCHARD, MANAGER
900 SOUTH 9TH STREET
LILLINGTON, NC 27546

CLIENT ID: 6040 G
ANALYST: MAO
DATE COLLECTED: 10/27/11
DATE REPORTED: 11/17/11

Page: 2

REVIEWED BY: 

VOLATILE ORGANICS EPA METHOD 8260B

PARAMETERS, ug/l	Date Analyzed:		11/03/11	11/04/11	11/04/11	11/04/11	11/04/11
	MDL	SWBL	MW-53	MW-56	MW-57	MW-58	MW-59
48. Tetrahydrofuran	0.39	1.0	--- U	--- U	0.50 J	--- U	--- U

J = Between MDL and SWBL, U = Below ALL Quantitation Limits.

Environment 1, Inc.
 P.O. Box 7085, 114 Oakmont Dr.
 Greenville, NC 27858

CHAIN OF CUSTODY RECORD

Phone (252) 756-6208 • Fax (252) 756-0633

CLIENT: 6040 G Week: 43

HARNETT CO. (DUNN/RIVIN)
 GENERAL SERVICES HARNETT CO.
 MR. JERRY BLANCHARD, MANAGER
 900 SOUTH 9TH STREET
 LILLINGTON NC 27546

(919) 233-0407

SAMPLE LOCATION	COLLECTION		TOTAL CHLORINE, mg/l AT COLLECTION	TEMPERATURE, °C AT COLLECTION	# OF CONTAINERS	DISINFECTION			Field pH	Metals	Turbidity	Conductivity	Temperature	Field Parameter	EPA 8260B	8260 Dup. 1	8260 Dup. 2	CHLORINE NEUTRALIZED AT COLLECTION
	DATE	TIME				CHLORINE	UV	NONE										
MW-53	10/27/11	0835		22	6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
MW-56	10/27/11	1020		21	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
MW-57	10/27/11	1035		23	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
MW-58	10/27/11	1005		22	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
MW-59	10/27/11	1045		23	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
RELINQUISHED BY (SIG.) (SAMPLER)	DATE/TIME	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME
<i>Bob Moore</i>	10/27/11		<i>[Signature]</i>	10/27/11														
RELINQUISHED BY (SIG.)	DATE/TIME	DATE/TIME	RECEIVED BY (SIG.)	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME	DATE/TIME

PLEASE READ Instructions for completing this form on the reverse side.

Sampler must place a "C" for composite sample or a "G" for Grab sample in the blocks above for each parameter requested.

CLASSIFICATION:

WASTEWATER (NPDES)

DRINKING WATER

DWQGW

SOLID WASTE SECTION

CHAIN OF CUSTODY MAINTAINED DURING SHIPMENT/DELIVERY

SAMPLES COLLECTED BY: *Moore, Foh*

(Please Print)

SAMPLES RECEIVED IN LAB AT *0.2* °C

APPENDIX E

Statistical Analysis Methodolgy

The United States Environmental Protection Agency (EPA) Guidance Document, Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, April 1989, was used as the main reference for the statistical procedures followed in this study. Details of the procedures and results obtained from the analysis are described in the following sections. An Excel™ adaptation of the EPA software GRITS/STAT (A Ground Water Information Tracking System with Statistical Analysis Capability, Version 4.2) was utilized to perform statistical calculations. Downgradient monitoring wells (MWs) MW2, MW3R, MW4, MW5, MW6B, MW7B, MW8, MW9, MW10, MW11, MW12, MW13, MW14, MW15, and MW23B are compared with the upgradient wells MW1 and MW31 (Data Set 1), and downgradient wells MW32, MW33, MW34, and MW35 are compared to upgradient well MW16 (Data Set 2) to evaluate the existence of statistically significant increases over background levels (SSIOBL) for each detected constituent. Surface Water Monitoring Points (SWPTs) SWPT2, SWPT3, and SWPT4 are compared with upgradient SWPT1 (Data Set 3) to evaluate the existence of SSIOBL for each Appendix I constituent.

For the reasons discussed in the Executive Summary regarding differences between historic and current method detection limits (MDLs) and the Solid Waste Section Limits (SWSLs), only detections exceeding the SWSLs are included in the statistical analysis. Estimated values (concentrations reported as greater than the MDL but less than the SWSL) are not included in the statistical analysis. When referring to the statistical analysis, a non-detect is a result less than the SWSL and a detection is a result greater than the SWSL. Where necessary, estimated values are compared to NCGS or 13B Groundwater Protection Standards (GPS). A comparison of NCGS and GPS standards, SWSLs, current MDLs and detection limits from 2006 for selected commonly detected constituents are presented in Table 5.

The one-way analysis of variance test (ANOVA) compares median concentrations of the respective upgradient and downgradient wells between data sets with at least four sampling events each. The Excel™ program was employed to perform the ANOVA for each parameter in a monitoring well group with less than 50% total non-detects in all wells over all sampling events.

All data sets with less than 15% non-detects were also tested for both normal and log-normal data distributions using EPA accepted normality tests. A parametric ANOVA was performed for those data sets meeting the normality and less than 15% non-detect requirements. The parametric ANOVA also tested for residual normality and homogeneity of variances (using Levene's Test) between data sets, both of which are necessary to determine those parameters that are SSIOBL using the parametric ANOVA. For both the parametric ANOVA and Levene's Test, non-detected concentrations were computed as one-half (1/2) of the method detection limit. If any of the above tests produced a negative result, the parametric ANOVA was disregarded. (No data sets met the criteria for a parametric ANOVA test during the latest event).

All data sets with less than 50% non-detects and not fulfilling the requirements of the parametric ANOVA test received the non-parametric ANOVA test, which utilized the Kruskal-Wallis Test for making comparisons between data sets.

The Test of Proportions, as outlined in Section 8.1.2 of the EPA Guidance document, was utilized for all data sets for constituents with less than or equal to 50% and above 10% detects in all monitoring wells combined. This test was further defined to include only those compliance wells (individually coupled with the background wells) that produced a large enough data set such that the total number of detects for the particular constituent was greater than or equal to five (5).

In select cases the compliance-to-background well analyses are not accurate because natural, statistically significant variations existed prior to the facility operation commencement. If the Test of Proportions indicates a result of SSIOBL for such a constituent, the prediction interval intra-well comparison was used to verify the statistical significance of the concentrations. If the average post-operational concentrations of the constituent are within the prediction interval analysis calculated based on background concentrations, the result is not considered SSIOBL. Estimated values are used in the prediction interval analysis. Previously, a non-detect value was treated as half the detection limit to calculate the interval. However, use of the estimated values allows for a more accurate prediction than using half the SWSL.

For all other instances that did not qualify for the ANOVA tests or the Test of Proportions, the detections were analyzed qualitatively. The qualitative analysis was conducted for individual constituents at a particular compliance well. Initially, the number of detections for the constituent in the particular compliance well was considered as follows:

- A compliance well with only one detection was not considered SSIOBL.
- For a compliance well with two or more detections and without detections in the background well, the order of magnitude (OOM) above the SWSL was evaluated. The OOM was computed as the logarithm of the actual detected concentration over the SWSL. If the average concentrations had an OOM greater than or equal to 0.67 (five times greater than the SWSL), the constituent was considered SSIOBL for the particular well. Prior to October 2007, the detection limit was used because the SWSLs had not been incorporated. As noted in the Executed Summary, the SWSL is more consistent with historic detection limits, compared to the much lower MDLs (refer to Table 5). As such, use of the SWSL allows for a more uniform comparison to the historic data and is also consistent with the use of SWSL in the other statistical analyses.
- For a compliance well with two or more detections and with detections of the particular constituent also in the background well, the compliance well was evaluated depending on the number and magnitude of detections at the compliance well, the background well, and their respective average concentration differences.