ALLEGHANEY COUNTY LANDFILL

SPARTA, NORTH CAROLINA

GROUNDWATER SAMPLING AND ANALYSIS PLAN

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Description of Compliance Groundwater Monitoring System

INTRODUCTION

This document outlines the procedures used for collecting and analyzing groundwater samples from the facilities groundwater monitoring system. This groundwater sampling and analysis plan is modeled after the RCRA guidance document for sampling and analysis plans.

The Alleghany County Landfill is located in Sparta, North Carolina, off State Road 1138 (Dan Osborne Road).

LOCATION AND DESCRIPTION OF MONITORING SYSTEM

Figure 1 is a potentiometric surface maps showing the following items:

1. Property boundaries of the facility
2. Well locations
3. Groundwater flow directions

Three groundwater monitoring wells have been installed at the waste management unit. Well 3 is hydraulically upgradient and the other two wells are downgradient of this well. Figure 2 is a schematic of the well construction techniques used for well placement. Table 1 is a listing of the wells and their elevations.

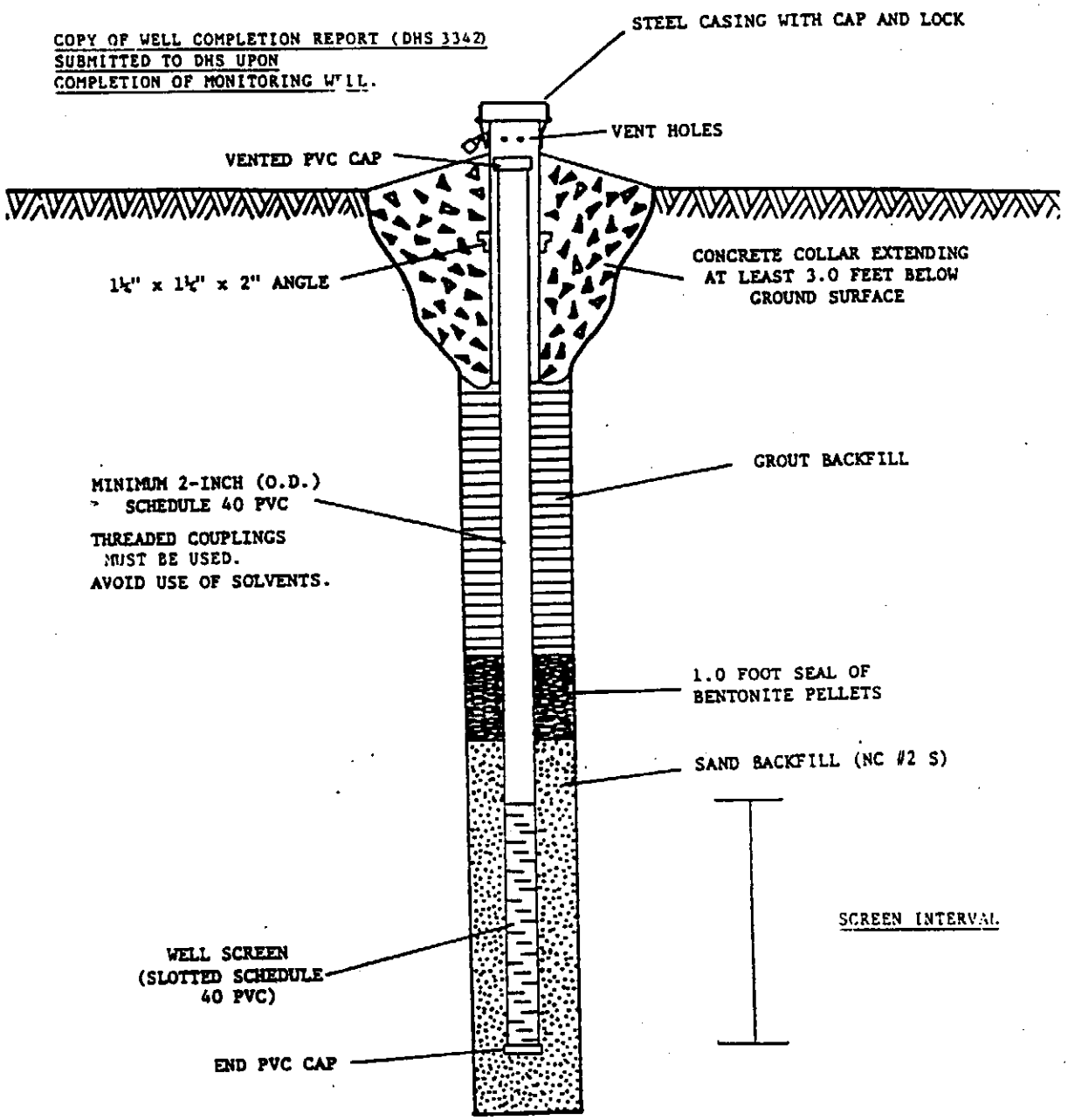

Figure 2. Typical ground-water monitoring well schematic diagram.

TABLE 1 WELL ELEVATIONS

Well Number	Surface Elevation[1]
1	149.0'
2	155.5'
3	192.0'

[1] Determined from landfill design map

GROUNDWATER SAMPLE COLLECTION LOG BOOK

A log book will be maintained that documents each sampling event. The following format is used in recording the events and data collected during each sampling event:

A. Name of person conducting sampling and any assistants or other people present.

Date(s) for each sampling event

Weather including temperature, cloud cover, high and low temperatures, most recent precipitation events, etc.

B. Well Data

1. Well number or other designation
2. Weather conditions (if different from above)
3. Condition of well
4. Elevation of the measuring point
5. Depth to bottom of well
6. Depth to water below measuring point
7. Number of feet of standing water in well bore
8. Volume of standing water

9. Elevation of water level
10. Time and date of purging
11. Equipment used for purging
12. Volume of water removed
13. Time of sample collection and date
14. Equipment used for sampling
15. Field measurements (not required if performed above)
16. Sample collection data (to be recorded in the following format).

SAMPLE #	CONTAINER	PRESERVATIVE	PARAMETER

NOTE: If wells are not purged to dryness, field measurements of pH, conductance, temperature, and time are to be recorded in the following format:

Time	pH	Conductance	Temperature

Measurements should be taken every five (5) minutes until the field parameters stabilize.

When field measurements are made, the type of buffer solution used to calibrate the pH meter should be noted and the frequency of calibration indicated.

WATER LEVEL MEASUREMENT AND WELL PURGING

Water level measurements should be taken at each well prior to purging. Dedicated bailers should be emptied and the water levels allowed to stabilize. Water level measurements should be taken every 30 minutes until stabilized. The water level measuring device currently used at the facility is an electronic water level measuring tape that gives an audible signal when it contacts the water. The elevations of each well is shown in Table 1. The type of device used in measuring should be recorded in the sample collection log book and the procedure for measuring if different from that described should be noted.

The measurements should be made to the nearest .01 foot and referenced to a common point such as the top of the casing and recorded in the field sampling book. This elevation has been referenced to NGVD on several maps. Water level measurements should be reduced and the actual NGVD elevation recorded in the field book. After the depth to the water table is known, it is necessary to compute the volume of water standing in the well bore. In order to do this, the total depth of the well must be known.

Use of the equation for computation of the volume of a right cylnder is necessary to compute the volume of water in the well bore.

This equation is:

$$V = II\ R^2\ h$$

where: V = volume

II = 3.14

R^2 = .5 feet

h = height of water

After the water volume is known, purging of this water should commence with the purge pump. At least 3 times the volume of standing water should be removed during the purging operation. Measurement can be estimated by filling 5 gallon buckets until the required purge volume has been reached.

After three times the volume of standing water in the well bore has been removed, it is necessary to check the equilibrium stability of the ground water. A sample should be collected using the same bailer and checked for pH, conductivity and temperature. This should be recorded and then the procedure repeated. When these three parameters stabilize for three successive samples, then actual sampling can begin.

NOTE: If a single purge pump is to be used for all wells, it must be cleaned between well sampling.

PREPARATION FOR WELL PURGING/SAMPLING

EQUIPMENT PREPARATION

Prior to purging the wells and collecting the samples, the necessary equipment must be collected. The list below is a guide to the types of equipment to use for sampling.

REQUIRED EQUIPMENT

Purge Pumps- Isomega bladder type with Tygon tubing and nitrogen gas lift capabilities.

Bailers- Teflon closed top type. One for each well.

Bailer Cord- Nylon type- to be discarded after each sampling event.

Water Level Measuring Device- Electric tape or steel tape with carpenter's chalk.

Sample Collection Bottles- Type and volumes for required tests shown in Table 1.

pH, Conductivity and Temperature Probes

Preservative- Not required if samples will be tested within 24 hours.

Coolers- To keep samples cool while collecting. After delivery to lab, samples should be refrigerated.

SPECIFIC EQUIPMENT

A. Equipment List

1. Purging- closed top, bottom loading teflon bailer with nylon rope; or stainless steel pump with teflon rotor, polypropylene discharge line, and teflon check valve between pump and discharge line

If there is a relatively large volume of water in the well, a Brainard Kilman Tri-Lock hand pump can be used to purge the standing water instead of the dedicated bailer. An electronic suction lift pump with a garden hose may be used to evacuate the well. A check valve immediately above the pump line intake of this device prevents backflow. This will prevent water in the pump line from draining into the well after the pump is shut off. The pump is cleaned between wells by circulating distilled water with a phosphate-free soap through the pump and rinsing the outer portions and inside with distilled water.

2. Sampling- closed top, bottom loading teflon bailer with nylon rope

If, due to mechanical malfunction, any other device is used to purge or sample the well, this deviation will be noted in the log book.

3. Field Measurements- field measurements, for pH, conductivity and temperature will be made using a Tekmar system

Field measurements will be made using the following equipment:

Parameter	Equipment
pH	Orion Model 201 digital meter
Temperature	Fisher Brand 9-325-360
Conductance	Fisher Brand 9-325-360

4. Sample containers and preservatives will follow the types outlined in Table 1. The following order of filling and sample containers will be used for sampling.

Order	#	Type of Container	Preservative	Parameters
1st	3	40 ml glass with septum top and no air space	ice, 4°C	volatile organic compounds

2nd	3	1 liter glass bottles	none	TOC-TOX metals bacteria
3rd	1	1 liter glass	none	field parameters

EQUIPMENT CLEANING PROCEDURE

A. Pumps and hoses will be cleaned with phosphate-free soap and tap water with tap water rinse at a minimum.

B. Bailers: bailers will be cleaned after each sampling event. Teflon Bailer- minimum cleaning required prior to groundwater sample collection.

1. phosphate-free soap and tap water wash
2. tap water rinse
3. 10% nitric or 10% hydrochloric acid rinse
4. deionized or distilled water rinse
5. isopropyl alcohol rinse
6. deionized or distilled water rinse
7. air dry
8. wrap to prevent contamination before use (specify material used for wrapping the bailer, example: aluminum foil, shiny side out)

Any variation to the above cleaning procedures will be submitted to DHS for approval.

PERSONAL PREPARATION

Personnel performing sampling should thoroughly wash their hands prior to sample collection. Clothing which has been worn around production areas should be changed or clean coveralls should be worn. Rubber laboratory gloves should be worn and changed after each well has been sampled.

GROUNDWATER SAMPLING PROCEDURE

The following procedure will be followed for sampling the groundwater wells:

A. Measure water levels as specified above

B. Purging of the wells will be accomplished by one of the following:
   a. Removing three well volumes
   b. Purging until field parameters stabilize
   c. Purging to dryness
   d. Purging until all water in the well is replaced

   The method used will be documented in the field log book.

C. Teflon bailers with polypropelene cord may be used to collect the sample. Bailers may be dedicated to each well. Bailer cord will be changed after each sampling event. Bailers are lowered into the well gently without splashing so as not to degas the samples. The sample will be obtained from the surface of the water in the monitoring wells in order to detect light phase immiscible layers. Samples may be collected with the pump described above. The location of the pump intake will be noted in the field log book.

D. Samples will be collected according to the order cited above, using the preservatives and bottles listed in Table 1.

Field measurements will be conducted in a separate container from the container used to collect the samples for laboratory analysis.

No field filtering of samples will occur.

SURFACE WATER MONITORING

The sample should be collected in an area representative of minimal turbulence and aeration. Because sample containers may be dipped by hand into the stream, extreme caution must be employed in avoiding contamination into the mouth of the container. The following procedures extracted from the "approved RCRA Ground-

Water Sampling and Analysis Plan" are recommended for extraction and subsequent collection of surface water samples.

1. Hold the bottle near the base with one hand, and with the other, remove the cap.

2. Rinse the sample container with the water to be sampled prior to filling the container. One exception to this is the coliform sample bottle. This bottle may have a pre-measured amount of sodium thyosulphate to neutralize any chlorine present in the water, therefore, this container should not be rinsed prior to sampling.

3. Push the sample container rapidly into the water (mouth down) and tilt-up towards the current to fill. A depth of about six inches is satisfactory. Great care should be taken to avoid breaching the surface while filling the container.

4. During times of little current movement, move the container slowly through the water laterally.

5. During times of extreme drought when depths are too shallow to allow submersion of the sample container, a pool may be scooped-out of the channel bottom and allowed to clear prior to sampling.

6. Lift the container from the water, and leave one-half inch of air space, and place the uncontaminated cap back-on the container.

SAMPLING OF IMMISCIBLE LAYERS

Sampling of light and dense phase immiscible fractions must precede well evacuation. Samples should be obtained with a double-check-valve bailer lowered to the predetermined level. Care must be taken to avoid actions which may disturb the interface between the organic and aqueous phases. This sampling technique detects the liquid and solid phases which tend to sink to the bottom or float to the top of the wells.

SAMPLE IDENTIFICATION AND SHIPMENT

The sample containers will be labeled with an indelible moisture proof label. The label is marked with a waterproof marker. The following information is put on the label:

Facility name

Well number

Analytical group

Date and time collected

A sample of the label is provided below:

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ENGINEERS • GEOLOGISTS • HYDROLOGISTS
P.O. Box 11846, Winston-Salem, NC 27106

The samples are then placed in a cooler with ice and transported to the lab by private vehicle. Blank samples will be submitted to the laboratory periodically to ensure quality control and determine if there is cross-contamination occurring at the lab.

SAMPLE PRESERVATIVE

If the samples cannot be analyzed immediately, the preservatives listed in Table 1 should be added to the appropriate analytical group. In any case, the sample should be placed on ice in the cooler between collection and their return to the lab where they are to be refrigerated. A Chain of Custody form must accompany the samples.

TABLE 2
RECOMMENDATION FOR SAMPLING AND PRESERVATION
OF SAMPLES ACCORDING TO MEASUREMENT(a)

Measurement	Volume Required (ml)	Container(b)	Preservative	Holding Time(c)
Physical Properties				
Color	50	P,G	Cool, 4 deg C	24 hrs.
Conductance	100	P,G	Cool, 4 deg C	24 hrs.(d)
Hardness	100	P,G	Cool, 4 deg C HNO_3 to pH 2	6 mos.(e)
Odor	200	G only	Cool, 4 deg C	24 hrs.
pH	25	P,G	Det. on site	6 hrs.
Residue				
Filterable	100	P,G	Cool, 4 deg C	7 days
Nonfilterable	100	P,G	Cool, 4 deg C	7 days
Total	100	P,G	Cool, 4 deg C	7 days
Volatile	100	P,G	Cool, 4 deg C	7 days
Settleable Matter	1000	P,G	None required	24 hrs.
Temperature	1000	P,G	Det. on site	No holding
Turbidity	100	P,G	Cool, 4 deg C	7 days

Measurement	Volume Required (ml)	Container(b)	Preservative	Holding Time(c)
Metals				
Dissolved	200	P,G	Filter on site HNO to pH 2	6 mos.(e)
Suspended	200		Filter on site	6 mos.
Total	100	P,G	HNO_3 to pH 2	
Mercury Dissolved	100	P,G	Filter on site HNO_3 to pH 2	38 days glass 13 days (hard plastic)
Total	100	P,G	HNO_3 to pH 2	38 days (glass) 13 days (hard plastic)
Inorganics, Nonmetallics				
Acidity	100	P,G	None required	24 hrs.
Alkalinity	100	P,G	Cool, 4 deg C	24 hrs.
Bromide	100	P,G	Cool, 4 deg C	24 hrs.
Chloride	50	P,G	None required	7 days
Chlorine	200	P,G	Det. on site	No holding
Cyanides	500	P,G	Cool, 4 deg C NaOH to pH 12	24 hrs.

Measurement	Volume Required (ml)	Container(b)	Preservative	Holding Time(c)
Fluoride	300	P,G	None required	7 days
Iodide	100	P,G	Cool, 4 deg C	24 hrs.
Nitrogen				
Ammonia	400	P,G	Cool, 4 deg C H_2SO_4 to pH 2	24 hrs.
Kjeldahl,	500	P,G	Cool, 4 deg C H_2SO_4 to pH 2	24 hrs.(f)
Nitrate plus Nitrite	100	P,G	Cool, 4 deg C H_2SO_4 to pH 2	24 hrs.(f)
Nitrate	100	P,G	Cool, 4 deg C	24 hrs.
Nitrite	50	P,G	Cool, 4 deg C	48 hrs.
Dissolved Oxygen Probe	300	G only	Det. on site	No holding
Winkler	300	G only	Fix on site	4-8 hrs.
Phosphorous Ortho-phosphate, Dissolved	50	P,G	Filter on site Cool, 4 deg C	24 hrs.
Hydrolyzable	50	P,G	Cool, 4 deg C H_2SO_4 to pH 2	24 hrs.(f)
Total	50	P,G	Cool, 4 deg C H_2SO_4 to pH 2	24 hrs.(f)
Total Dissolved	50	P,G	Filter on site H_2SO_4 to pH 2	24 hrs.(f)

Measurement	Volume Required (ml)	Container(b)	Preservative	Holding Time(c)
Silica	50	P only	Cool, 4 deg C	7 days
Sulfate	50	P,G	Cool, 4 deg C	7 days
Sulfide	500	P,G	2 ml zinc acetate	24 hrs.
Sulfite	50	P,G	Det. on site	No holding
Routine Organics				
BOD	1000	P,G	Cool, 4 deg C	24 hrs.
COD	50	P,G	H_2SO_4 to pH 2	7 days(f)
Oil & Grease	1000	G only	Cool, 4 deg C H_2SO_4 or HCL to pH 2	24 hrs.
Organic Carbon	25	P,G	Cool, 4 deg C H_2SO_4 or HCL to pH 2	24 hrs.
Phenolics	500	G only	Cool, 4 deg C H_3PO_4 to pH 4 1.0 g CuSO /l	24 hrs.
MBAS	250	P,G	Cool, 4 deg C	24 hrs.
NTA	50	P,G	Cool, 4 deg C	24 hrs.

a. A general discussion on sampling water and industrial wastewater may be found in ASTM, Part 31, p. 72-82 (1976) Method D-3370.

b. Plastic (P) or Glass (G). For metals polyethylene with a polypropylene cap (no liner) is preferred.

c. It should be pointed out that holding times above are recommended for properly preserved samples based on currently available data. It is recognized that for some sample types, extension of these times may be possible while for other types, these times may be too long. Where shipping regulations prevent the use of proper preservation technique or holding time is exceeded, such as the case of a 24-hour composite, the final reported data for these samples should indicate the specific variance.

d. If the sample is stabilized by cooling, it should be warmed to 25 deg C for reading, or temperature correction made and results reported at 25 deg C.

e. Where HNO_3 cannot be used because of shipping restrictions, the sample may be initially preserved by icing and immediately shipped to the laboratory. Upon receipt in the laboratory, the sample must be acidified to a pH 2 with HNO_3 (normally 3 ml 1:1 HNO_3/liter is sufficient). At the

time of analysis, the sample container should be thoroughly rinsed with 1:1 HNO_3 and the washings added to the sample (volume correction may be required).

f. Data obtained from National Enforcement Investigations Center, Denver, Colorado, support a four-week holding time for this parameter in Sewerage Systems (SIC 4952).

CHAIN OF CUSTODY

The custody of the samples is tracked with the Chain of Custody Form shown below. The sample collector originates the form and keeps it with the samples until they are transferred over to the laboratory personnel. The chain of custody form is then given to the lab personnel who puts the samples in the lab system. The chain of custody form is signed by the lab personnel and put in the groundwater monitoring file. After the analyses have been completed, a copy of the form is attached to the sample report form and sent to the Division of Health Services.

ANALYTICAL METHODS

All inorganic analyses will be performed in the ETI Labs of Charlotte or IEA Labs of Durham. Organic analyses will be performed by ETI Labs of Charlotte or an equivalent EPA certified lab. A list of lab equipment is given in Table 3 below.

All analytical testing is to follow the USEPA test procedures and quality control as outlined for each parameter in "Standard Methods for the Analysis of Water and Wastes". Test results will be submitted to the Regional Administrator within 15 working days of completion.

Parameters to be analyzed are given in Table 4. Test methods for these parameters are provided in Table 5.

ENGINEERING TECTONICS, P.A.
ENGINEERS • GEOLOGISTS • HYDROLOGISTS
P.O. Box 11846, Winston-Salem, NC 27106

FIELD SAMPLING INFORMATION SHEET
CHAIN OF CUSTODY RECORD
(Hazardous Materials and Others)

This form must be completed prior to processing samples in Laboratory. (No samples will be processed without Job No. and Billing Instructions.)

Job No.: _____ Laboratory Sample No.: _____ (Lab Use Only)

Client or System Name: _____

County: _____

Address: _____

Date Collected: _____ Time Collected: _____ (Hrs.)

Sample Location or Description: _____

_____

Type of Sample: ☐ Water ☐ Wastewater ☐ Sludge ☐ Hazardous Waste ☐ Other _____

If Hazardous: Type Code (if any): _____ DOT or EPA ID No.: _____

Field Information/Comments (or) Sample Handling Precautions: _____

_____

I hereby certify that the above information is correct.

Collector's Certification: _____
(Signature)

"Sample Allocation" and "Chain of Possession": (Sign & Date in Ink)

	Signature	Date	Time (Hrs.)
1. Sample Collector:			
2. Sample Transporter:			
3. Sample Received in Lab:			
4. Sample Analysis Completed:			

Lab Test Requested (List Below):

_____ _____ _____

_____ _____ _____

_____ _____ _____

_____ _____ _____

Lab Billing Instruction: _____

_____

_____

Special Instructions or Comments: _____

_____

TABLE 3
LABORATORY EQUIPMENT LIST

Instrument	Manufacturer	Model
Turbidmeter	Fisher	
Centrifuge	International	CL
Magnetic Stirrers	Fisher	120 ML
Conductivity Bridge	YSI	31
pH Meter	Fisher	520
pH Meter	Fisher	620
DO Recorders	YSI	80A
Probe Control Panel	Orion	605
Variable Temp. Heaters	Precision Scientific	61560
Water Stills	Corning	AG-11
Demineralizer Brackets	Barnstead	
Grinders	TEKMAR	A-10
Dessicators	Fisher	12x12
Balance	Mettler	H-32
Drying Oven	Fisher	401
Furnace	Thermolyne	FB 1315M
COD Heating Racks	PS	6 Place
Tube Heater	Kontes	627
Spectronic	Bausch & Lomb	70
Extractors	Millipore	B-154
pH Meters	Cole Palmer	
Mini pH Meters	Fisher	460
Control Boxes	Tektrol	E2500
Kjeldahl Flask Racks	SP	
Flash Tester	Pensky Martin	ASTMD-93
Heating Mantles	PS	61526
Pressure Filter Unit	Millipore	
Recording Thermometers	YSI	425
pH Meter	Markson	10
pH Meter	Corning	4
Trip Balances	OHAUS	
Class Q Weights	OHAUS	
Water Bath	PS	66738
Class S Weights	OHAUS	
Vacuum Pumps	Fisher	0276
Diameter	YSI	M54
Sulfidemeter	YSI	M34
Ovens	Despatch	
Balance	Mettler	AK-160
DAF Pressure Column	MGA	
Samplers	Manning	S4040-T
Samplers	ISCO	2100
Water Level Recorders	Leopold/Stevens	
Gas Lift Ground Water Samplers	TIMCO	
Variable Capacity Bailers	TIMCO	
Standard Bailers	TIMCO	

LABORATORY EQUIPMENT LIST

Instrument	Manufacturer	Model
Chargers	ISCO	
Atomic Absorption Unit	Perkin-Elmer	503
Water Still	Corning	AG-3
COD Reactors	HACH	6500-10
Spectrophotometer	HACH	DR/2
Hot Plate/Stirrer	Corning	PC-351
Portable Flow Meters	Manning	S4000
Trap Samplers	LEMOTT	
4-Paddle Jar Tester	Phipps & Bird	7900-220
6-Paddle Jar Tester	Phipps & Bird	
Oxygen-Methane Monitor	Bullard	EVI
Well Sampler Kit	Cole Palmer	
Hydro Lab & Probes	Hydro Lab	
Sonic Flow Meters & Froms	Manning	
Pilot Plant Equipment	MGA	
Water Baths	Blue-M Co.	MM 1120A-1
Water Baths (30 gal)	Blue-M Co.	MM 1120A-10
Incubators	Precision	815
Refrigerator	Hotpoint	CTA 14ALD
Microscope	A&O	0390
Illuminators	B&L	
Stereo Microscope	B&L	
Manifolds	Gelman	4205
Colony Counter	Fisher	7-910
UV Sterilizer	MGA	
Autoclaves	Market Forge	STM-E
Oven	Despatch	LG
Gas Chromotograph	Perkin-Elmer	Sigma 2B
Atomic Absorption Unit	Perkin-Elmer	5000
Oxygen Meter/Case	YSI	54
Graphite Furnace	Perkin-Elmer	HGA 400
EDL Power Supply	Perkin-Elmer	
Deuterium ARC Power Supply	Perkin-Elmer	
Burner Control	Perkin-Elmer	
Strip Chart Recorder	Perkin-Elmer	56
Strip Chart Recorder	Perkin-Elmer	24
Purge & Trap	TEKMAR	LSC-2
Autolab Minigrator	Spectra Physics	2300-010
Bacteria Incubator	Fisher	303
Incubator	Fisher	300
A.A. Printer	Perkin-Elmer	PRS-10
A.A. Auto Burner Control	Perkin-Elmer	5000
Auto Sampler	Perkin-Elmer	
Refrigerators	GE	106
Incubator (BOD)	PS	815
Fire Cabinets	SP	
Water Level Detectors		

Table 4
PARAMETERS TO BE ANALYZED

The parameters shown in Table 4 will be analyzed at each well.

Arsenic
Barium
Cadmium
Chloride
Chromium
Copper
Flouride
Iron
Lead
Manganese
Mercury
Nickel
Nitrate
Nitrite
Selenium
Silver
Sulfates
Zinc
Total Organic Halogens
Total Organic Carbon
Total Dissolved Solids
Biological Oxygen Demand
Chemical Oxygen Demand
Conductivity
pH

Table 4
PARAMETERS TO BE ANALYZED

The parameters shown in Table 4 will be analyzed at each well.

Arsenic
Barium
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Copper
Fluoride
Iron
Lead
Manganese
Mercury
Nitrate
Selenium
Silver
Sulfates
Zinc
Total Organic Halogens
Total Organic Carbon
Total Dissolved Solids
Biological Oxygen Demand
Chemical Oxygen Demand
Conductivity
pH

TABLE 5
EPA ID CODE FOR METHODS OF ANALYSIS

Parameter	Method ID Code	Maximum Contaminant Levels (mg/l)
Arsenic (AA furnace)	206.2	0.05
Barium (AA direct aspiration)	208.1	1.0
Cadmium (AA direct aspiration)	213.2	0.01
Chloride (Titrimetric)	407B	250
Chromium (AA direct aspiration)	218.1	0.05
Copper (AA direct aspiration)	220.1	1.0
Fluoride (SPADNS)	413C	1.4
Iron (AA direct aspiration)	236.1	0.3
Lead (AA direct aspiration)	239.1	0.05
Manganese (AA direct aspiration)	243.1	0.05
Mercury (Cold vapor)	245.1	0.002
Nitrate (Brucine sulfate)	352.1	45
Selenium (AA furnance)	270.2	0.01
Silver (AA direct aspiration)	272.1	0.05
Sulfates (Turbidimetric)	426C	250
Zinc (AA direct aspiration)	289.1	5.0
Total Organic Halogens	Dorhman DX-20	
Total Organic Carbon (Combustion or oxidation)	505	
Total Dissolved Solids	-	
Biological Oxygen Demand (Electrode)	507	
Chemical Oxygen Demand (Titrimetric)	508A-HACH	
Conductivity (Wheatstone bridge)	205	
pH (Electrometric)	423	

SCHEDULE FOR SAMPLE COLLECTION AND REPORTING

The following schedule in this table for sampling, analysis, statistical evaluation and reporting is adhered to at this facility.

A. Sample Collection Schedule

Sampled	Well(s)	Parameters	Reporting Date
Annually	Wells 1, 2, and 3	Inorganic and Indicators	AR + 15 *

*Date analysis received plus number of days

Results of analysis will be reported to DHS within 15 days of receipt from the lab.

If analyses cannot be submitted by the reporting date, then the facility will notify the State in writing and propose a date for submission.

CERTIFICATION

I, _____, hereby certify that the above procedures and equipment are used during each groundwater sampling event. I understand that failure to follow the above Sampling and Analysis Plan will result in a violation of the North Carolina Hazardous Waste Management Rules and a penalty may be assessed.

Procedures to be Implemented if the Groundwater Compliance Standard is Exceeded at the Compliance Point Monitoring Wells

Within 10 days of the confirmation of exceeding the compliance point water standards, the facility will notify the Division of Health Services in writing and will make application to modify this permit to establish a corrective action program to comply with the groundwater protection standard or propose alternate concentration limits for the constituents exceeded at the compliance points.