DENR USE ONLY: ☐ Paper Report ☐ Electronic Data - Email CD (data loaded: Yes / No) Doc/Event #:

NC DENR
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).
- In accordance with NC General Statutes Chapter 89C and 89E and NC Solid Waste Management Rules 15A NCAC 13B, be sure to affix a seal to the bottom of this page, when applicable.
- 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):

SCS Engineers-Consultant; Pace Labs-Laboratory

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

Name: C. Ed Hilton, Jr., P.E. Phone: 813-621-0080

E-mail: ehilton@scsengnieers.com

Facility name:	Facility Address:	Facility Permit #	NC Landfill Rule: (.0500 or .1600)	Actual sampling dates (e.g., October 20-24, 2006)
Buncombe County New Landfill	85 Panther Branch Road Alexander, North Carolina 28701	11-07	.1600	March 24-27, 2008

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
☐ Groundwater monitoring data from private water supply wells
☐ Leachate monitoring data
☒ Surface water monitoring data
☐ Methane gas monitoring data
☐ Corrective action data (specify) _____
☐ Other(specify)

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.

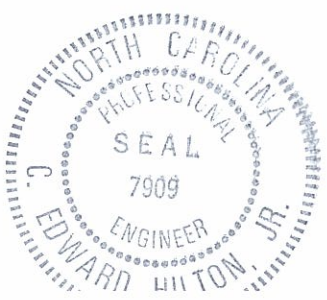
C. Ed Hilton, Jr., P.E. | Project Director | 813-621-0080

Facility Representative Name (Print) | Title | (Area Code) Telephone Number

C. Ed Hilton Jr. 6/11/08

Signature | Date

Affix NC Licensed/ Professional Geologist/Engineer Seal here:



Revised 01/2007

Exceedances by Date Range

Buncombe County New Facility

From: 3/24/2008 ***To:*** 4/3/2008

Site ID	*Analyte*	*Date*	*Result*
Leachate			
	Benzene		
	DENR WQS: 1 ***ug/l***		
		3/24/2008	1.9 ug/L

Detections By Date Range

Buncombe County New Facility

From: 3/24/2008 ***To:*** 3/27/2008

Site ID	*Analyte*	*Date*	*Result*
LD-1			
	Barium		
		3/24/2008	36.6 ug/L
	Cobalt		
		3/24/2008	114 ug/L
	1,1-Dichloroethane		
		3/24/2008	2.1 ug/L
	Nickel		
		3/24/2008	65.8 ug/L
	Zinc		
		3/24/2008	24.3 ug/L
LD-3			
	Barium		
		3/24/2008	156 ug/L
	Cobalt		
		3/24/2008	6.7 ug/L
	Copper		
		3/24/2008	6.0 ug/L
	Nickel		
		3/24/2008	14.5 ug/L
	Zinc		
		3/24/2008	13.5 ug/L

Site ID	Analyte	Date	Result
Leachate			
	Acetone		
		3/24/2008	83.4 ug/L
	Barium		
		3/24/2008	160 ug/L
	Benzene		
		3/24/2008	1.9 ug/L
	c-1,2-Dichloroethene		
		3/24/2008	1.2 ug/L
	Ethylbenzene		
		3/24/2008	3.8 ug/L
	Methyl ethyl ketone		
		3/24/2008	164 ug/L
	4-Methyl-2-pentanone		
		3/24/2008	6.1 ug/L
	Nickel		
		3/24/2008	44.5 ug/L
	Toluene		
		3/24/2008	262 ug/L
	Xylenes		
		3/24/2008	7.7 ug/L
	Zinc		
		3/24/2008	41.9 ug/L
MW-12			
	Barium		
		3/27/2008	98.1 ug/L
	Nickel		
		3/27/2008	11.7 ug/L
MW-12D			
	Barium		
		3/27/2008	76.6 ug/L
	Chromium		
		3/27/2008	5.6 ug/L
	Copper		
		3/27/2008	6.1 ug/L
	Nickel		
		3/27/2008	6.7 ug/L
	Vanadium		
		3/27/2008	15.5 ug/L
	Zinc		
		3/27/2008	10.1 ug/L

Site ID	Analyte	Date	Result
MW-1			
	Barium		
		3/26/2008	258 ug/L
	Chromium		
		3/26/2008	13.2 ug/L
	Copper		
		3/26/2008	20.3 ug/L
	Nickel		
		3/26/2008	12.8 ug/L
	Vanadium		
		3/26/2008	37.5 ug/L
	Zinc		
		3/26/2008	24.6 ug/L
MW-1D			
	Barium		
		3/26/2008	28.1 ug/L
	Vanadium		
		3/26/2008	6.1 ug/L
MW-2			
	Barium		
		3/26/2008	61.0 ug/L
MW-2D			
	Barium		
		3/26/2008	77.2 ug/L
MW-3			
	Barium		
		3/26/2008	302 ug/L
	Chromium		
		3/26/2008	45.6 ug/L
	Copper		
		3/26/2008	37.6 ug/L
	Nickel		
		3/26/2008	42.2 ug/L
	Vanadium		
		3/26/2008	90.4 ug/L
	Zinc		
		3/26/2008	52.2 ug/L

Site ID	Analyte	Date	Result
MW-4			
	Barium		
		3/26/2008	74.9 ug/L
	Nickel		
		3/26/2008	5.0 ug/L
	Thallium		
		3/26/2008	8.3 ug/L
	Vanadium		
		3/26/2008	10.5 ug/L
MW-4D			
	Barium		
		3/26/2008	31.9 ug/L
	Thallium		
		3/26/2008	9.8 ug/L
	Vanadium		
		3/26/2008	9.7 ug/L
MW-5			
	Barium		
		3/26/2008	103 ug/L
	Chromium		
		3/26/2008	6.9 ug/L
	Nickel		
		3/26/2008	5.1 ug/L
	Vanadium		
		3/26/2008	13.7 ug/L
MW-5D			
	Barium		
		3/26/2008	51.2 ug/L
	Zinc		
		3/26/2008	22.4 ug/L
MW-6			
	Barium		
		3/26/2008	165 ug/L
	Chromium		
		3/26/2008	31.6 ug/L
	Copper		
		3/26/2008	15.6 ug/L
	Nickel		
		3/26/2008	12.2 ug/L
	Vanadium		
		3/26/2008	48.1 ug/L
	Zinc		
		3/26/2008	42.9 ug/L

Site ID	Analyte	Date	Result
MW-7			
	Barium		
		3/26/2008	98.3 ug/L
	Copper		
		3/26/2008	6.2 ug/L
	Nickel		
		3/26/2008	14.2 ug/L
	Vanadium		
		3/26/2008	9.6 ug/L
	Zinc		
		3/26/2008	15.6 ug/L
MW-8			
	Barium		
		3/27/2008	98.9 ug/L
	Chromium		
		3/27/2008	5.1 ug/L
	Thallium		
		3/27/2008	9.5 ug/L
	Vanadium		
		3/27/2008	11.5 ug/L
	Zinc		
		3/27/2008	12.8 ug/L
MW-8D			
	Barium		
		3/27/2008	89.1 ug/L
	Thallium		
		3/27/2008	7.8 ug/L
MW-10			
	Barium		
		3/26/2008	116 ug/L
	Chromium		
		3/26/2008	5.0 ug/L
	Copper		
		3/26/2008	10.1 ug/L
	Vanadium		
		3/26/2008	7.8 ug/L
	Zinc		
		3/26/2008	25.8 ug/L
MW-10D			
	Barium		
		3/26/2008	17.8 ug/L
	Nickel		
		3/26/2008	7.9 ug/L
	Zinc		
		3/26/2008	11.2 ug/L

Site ID	Analyte	Date	Result
MW-11			
	Barium		
		3/27/2008	66.6 ug/L
	Copper		
		3/27/2008	46.7 ug/L
	Nickel		
		3/27/2008	59.8 ug/L
MW-11D			
	Barium		
		3/27/2008	15.6 ug/L
	Zinc		
		3/27/2008	28.0 ug/L
MW-13			
	Barium		
		3/27/2008	160 ug/L
	Zinc		
		3/27/2008	23.6 ug/L
MW-13D			
	Barium		
		3/27/2008	225 ug/L
	Cobalt		
		3/27/2008	10.0 ug/L
	Nickel		
		3/27/2008	35.6 ug/L
	Vanadium		
		3/27/2008	9.6 ug/L
	Zinc		
		3/27/2008	16.4 ug/L
MW-14			
	Barium		
		3/27/2008	143 ug/L
	Chromium		
		3/27/2008	23.7 ug/L
	Copper		
		3/27/2008	19.2 ug/L
	Lead		
		3/27/2008	5.6 ug/L
	Nickel		
		3/27/2008	20.1 ug/L
	Vanadium		
		3/27/2008	56.1 ug/L
	Zinc		
		3/27/2008	30.3 ug/L

Barium concentrations (ug/l) | **Buncombe County New Landfill** | **Tolerance Interval Calculations Spring 2008**

	Background	Compliance Wells										
Date	**MW-1**	**MW-2**	**MW-3**	**MW-4**	**MW-5**	**MW-6**	**MW-7**	**MW-8**	**MW-9**	**MW-10**	**MW-11**	**MW-12**	**MW-13**
3/26/2008	258	61	302	74.9	103	165	98.3	98.9		116	66.6	98.1	160
9/27/2007	314	1080*	207	87.8	89.9	92.5	125	83.7	Out of Service	132	179	460	217
3/27/2007	220	BDL	180	BDL	BDL	BDL	200	BDL	Out of Service	100	BDL	BDL	120
9/22/2006	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/24/2006	260	970*	560	250	78	230	170	68	Out of Service	220	150	210	140
9/27/2005	180	610	1500*	160	78	180	300	52	200	200	77	260	140
4/11/2005	150	1000*	1300*	470	69	1400*	1500*	130	220	410	61	220	
9/27/2004	190	1100*	220	86	74	180	220	100	240	340	49	280	
3/30/2004	130	280	150	200	120	54	160	87	250	150	100	140	
9/30/2003	290	410	380	87	67	1100*	500	70	190	240	60	86	
3/25/2003	190	120	260	110	52	59	120	62	160	320	61	220	
10/28/2002	350												
4/30/2002	280												
10/23/2001	430												
5/1/2001	570												
11/6/2000	610												
4/4/2000	108												
11/2/1999	240												
4/27/1999	419												
11/9/1998	709												
4/14/1998	528												

n=	21	number of observations
Mean=	321	arithmetic mean
SD=	171	standard deviation
K=	2.523	one-sided normal tolerance factor (from table)
TL=	752	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

	Background	Compliance Wells								
Date	**MW-1D**	**MW-2D**	**MW-4D**	**MW-5D**	**MW-8D**	**MW-9D**	**MW-10D**	**MW-11D**	**MW-12D**	**MW-13D**
3/26/2008	28	77.2	31.9	51.2	89.1	Out of Service	17.8	15.6	76.6	225
9/27/2007	96	89.9	30.7	51.7	88.2	Out of Service	30.9	17.7	262	211
3/27/2007	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	220
9/22/2006	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/22/2006	42	84	32	48	68	Out of Service	32	16	140	460
9/27/2005	170	79	33	45	57	240	160	17	160	400
4/11/2005	38	81	32	49	56	200	54	13	370	
9/27/2004	27	140	32	55	58	220	17	15	420	
3/30/2004	76	100	62	50	55	190	12	17	6.8	
9/30/2003	52	7.7	5.5	53	52	180	12	63	150	
3/25/2003	37	77	45	50	53	130	130	65	1000	
10/28/2002	270									
4/30/2002	60									
10/23/2001	110									
5/1/2001	530									
11/6/2000	880									
4/4/2000	1290									

n=	17	number of observations
Mean=	247	arithmetic mean
SD=	373	standard deviation
K=	2.736	one-sided normal tolerance factor (from table)
TL=	1267	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

Chromium concentrations (ug/l) | **Buncombe County New Landfill** | **Tolerance Interval Calculations Spring 2008**

	Background	Compliance Wells										
Date	**MW-1**	**MW-2**	**MW-3**	**MW-4**	**MW-5**	**MW-6**	**MW-7**	**MW-8**	**MW-9**	**MW-10**	**MW-11**	**MW-12**	**MW-13**
3/26/2008	13	BDL	45.6	BDL	6.9	31.6	BDL	5.1	Out of Service	5	BDL	BDL	BDL
9/27/2007	13	59.1	12.7	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	45.5	36.8	BDL
3/27/2007	BDL	BDL	10	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/24/2006	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/23/2006	15	85	110	15	4.5	2.5	2	BDL	Out of Service	35	32	8.3	BDL
9/26/2005	1	46	25	19	12	16	23	2.5	BDL	16	6	4.3	BDL
4/11/2005	1	83	280*	68	2.8	300*	220*	14	4.6	59	2	13	
9/27/2004	6.4	57	27	2.1	8	37	15	8.3	BDL	43	BDL	10	
3/30/2004	29	18	12	23	8.3	BDL	BDL	9.5	BDL	16	20	BDL	
9/30/2003	20	26	85	BDL	7.4	290*	81	5.2	BDL	43	6.9	7.7	
3/25/2003	5.1	120	47	9.3	8.4	BDL	5.1	BDL	BDL	69	7.6	36	
10/28/2002	42												
4/30/2002	23												
10/23/2001	34												
5/1/2001	2.5												
11/6/2000	9.9												
4/4/2000	1												
11/2/1999	22												
4/27/1999	47												
11/9/1998	176												
4/14/1998	60												

n=	21	number of observations
Mean=	27	arithmetic mean
SD=	40	standard deviation
K=	2.523	one-sided normal tolerance factor (from table)
TL=	128	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

	Background	Compliance Wells								
Date	**MW-1D**	**MW-2D**	**MW-4D**	**MW-5D**	**MW-8D**	**MW-9D**	**MW-10D**	**MW-11D**	**MW-12D**	**MW-13D**
3/26/2008	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	5.6	BDL
9/27/2007	6	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	25.5	BDL
3/27/2007	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	15
9/24/2006	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/23/2006	BDL	BDL	BDL	BDL	BDL	Out of Service	3.2	BDL	BDL	28
10/10/2005	1	2.1	BDL	BDL	BDL	BDL	33	BDL	**3**	64
4/11/2005	1	BDL	BDL	BDL	BDL	BDL	8	BDL	45	
9/27/2004	1	5.1	BDL	BDL	BDL	BDL	BDL	BDL	50	
3/30/2004	1	5.7	62	BDL	BDL	BDL	BDL	BDL	BDL	
9/30/2003	2.5	9.7	BDL	BDL	BDL	2.7	BDL	BDL	13	
3/25/2003	12	BDL	BDL	BDL	BDL	BDL	35	BDL	170	
10/28/2002	9.1									
4/30/2002	2.5									
10/23/2001	2.5									
5/1/2001	5.9									
11/6/2000	31									
4/4/2000	202									

n=	17	number of observations
Mean=	21	arithmetic mean
SD=	55	standard deviation
K=	2.736	one-sided normal tolerance factor (from table)
TL=	172	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

Copper concentrations (ug/l) | **Buncombe County New Landfill** | **Tolerance Interval Calculations Spring 2008**

	Background	Compliance Wells										
Date	**MW-1**	**MW-2**	**MW-3**	**MW-4**	**MW-5**	**MW-6**	**MW-7**	**MW-8**	**MW-9**	**MW-10**	**MW-11**	**MW-12**	**MW-13**
3/26/2008	20	BDL	37.6	BDL	BDL	15.6	6.2	BDL	Out of Service	10.1	46.7	BDL	BDL
9/27/2007	23	50.9	10.6	BDL	BDL	BDL	BDL	BDL	Out of Service	17.6	67.5	62.5	BDL
3/27/2007	13	BDL	BDL	BDL	BDL	BDL	18	18	Out of Service	17	BDL	BDL	BDL
9/24/2006	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/23/2006	15	63	64	17	BDL	9.3	BDL	BDL	Out of Service	12	38	8.3	BDL
10/10/2005	11	28	77	12	2.5	9	28	3.7	BDL	79	14	5.2	3.6
4/11/2005	2.8	61	160*	57	BDL	140*	240*	14	3.2	170*	5.2	15	
9/27/2004	11	46	13	2.1	2.5	14	22	8.4	2.7	28	2.7	15	
3/30/2004	5	13	9.3	19	5.2	BDL	BDL	9.3	BDL	6	28	BDL	
9/30/2003	9	20	36	2.7	3.6	100*	74	5.9	2.6	24	9.7	8	
3/25/2003	8.3	4	18	8.1	2.9	BDL	5.5	4.1	2.6	31	5.9	22	
10/28/2002	44												
4/30/2002	23												
10/23/2001	48												
5/1/2001	14												
11/6/2000	21												
4/4/2000	**2.5**												
11/2/1999	16												
4/27/1999	43												
11/9/1998	76												
4/14/1998	56												

n=	21	number of observations
Mean=	23	arithmetic mean
SD=	20	standard deviation
K=	2.523	one-sided normal tolerance factor (from table)
TL=	73	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

	Background	Compliance Wells								
Date	**MW-1D**	**MW-2D**	**MW-4D**	**MW-5D**	**MW-8D**	**MW-9D**	**MW-10D**	**MW-11D**	**MW-12D**	**MW-13D**
3/26/2008	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	6.1	BDL
9/27/2007	17	BDL	BDL	BDL	BDL	Out of Service	10.6	BDL	43.1	BDL
3/27/2007	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	12
9/24/2006	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/23/2006	4	BDL	BDL	BDL	BDL	Out of Service	12	BDL	BDL	45
10/10/2005	1	BDL	BDL	BDL	BDL	BDL	43	BDL	12	34
4/11/2005	1	BDL	BDL	BDL	BDL	BDL	19	BDL	61	
9/27/2004	5	11	BDL	BDL	4.1	BDL	2	BDL	82	
3/30/2004	6.8	3.4	13	BDL	BDL	3.4	3	BDL	2.2	
9/30/2003	6	6.8	2.4	2.2	BDL	6.7	2.8	3.2	16	
3/25/2003	2.1	BDL	6.7	BDL	BDL	BDL	21	2.6	200	
10/28/2002	8.7									
4/30/2002	2.8									
10/23/2001	2.5									
5/1/2001	9.1									
11/6/2000	27									
4/4/2000	240									

n=	17	number of observations
Mean=	24	arithmetic mean
SD=	63	standard deviation
K=	2.736	one-sided normal tolerance factor (from table)
TL=	195	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

Nickel concentrations (ug/l) | **Buncombe County New Landfill** | **Tolerance Interval Calculations Spring 2008**

	Background	Compliance Wells										
Date	**MW-1**	**MW-2**	**MW-3**	**MW-4**	**MW-5**	**MW-6**	**MW-7**	**MW-8**	**MW-9**	**MW-10**	**MW-11**	**MW-12**	**MW-13**
3/16/2008	13	BDL	42.2	5	5.1	12.2	14.2	BDL	Out of Service	BLD	59.8	11.7	BDL
9/27/2007	13	80.6	23.5	6.5	BDL	BDL	14.2	BDL	Out of Service	5.6	80.3	61.6	BDL
3/27/2007	BDL	BDL	28	BDL	BDL	BDL	18	BDL	Out of Service	BDL	23	BDL	BDL
9/24/2006	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/23/2006	10	92	98*	12	BDL	6.3	13	BDL	Out of Service	18	68	18	BDL
10/10/2005	2.5	BDL	120*	9.4	BDL	8	42	BDL	30	14	35	22	BDL
4/11/2005	2.5	97	190*	35	BDL	92	250	9.7	33	36	32	21	
9/27/2004	2.5	66	50	BDL	BDL	12	28	BDL	20	18	19	23	
3/30/2004	2.5	21	55	13	5.1	BDL	13	5.2	23	8.7	4.8	5	
9/30/2003	15	32	6.1	BDL	BDL	100	92	BDL	21	23	20	9.1	
3/25/2003	5	6.7	62	5.5	BDL	BDL	12	BDL	36	36	21	48	
10/28/2002	30												
4/30/2002	18												
10/23/2001	30												
5/1/2001	13												
11/6/2000	21												
4/4/2000	2.5												
11/2/1999	16												
4/27/1999	33												
11/9/1998	120												
4/14/1998	40												

n=	21	number of observations
Mean=	21	arithmetic mean
SD=	27	standard deviation
K=	2.523	one-sided normal tolerance factor (from table)
TL=	88	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

	Background	Compliance Wells								
Date	**MW-1D**	**MW-2D**	**MW-4D**	**MW-5D**	**MW-8D**	**MW-9D**	**MW-10D**	**MW-11D**	**MW-12D**	**MW-13D**
3/26/2008	BDL	BDL	BDL	BDL	BDL	Out of Service	7.9	BDL	6.7	35.6
9/27/2007	14	BDL	BDL	BDL	BDL	Out of Service	15.2	BDL	32.5	24.3
3/27/2007	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	26
9/24/2006	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/23/2006	BDL	BDL	BDL	BDL	BDL	Out of Service	18	BDL	7.2	47
10/10/2005	21	BDL	BDL	BDL	BDL	14	63	BDL	9.9	58
4/11/2005	2.5	BDL	BDL	BDL	BDL	8.7	35	BDL	41	
9/27/2004	2.5	BDL	BDL	BDL	BDL	BDL	12	BDL	52	
3/30/2004	9.7	BDL	7	BDL	BDL	8.6	6.8	BDL	BDL	
9/30/2003	7.8	7.2	BDL	BDL	BDL	10	10	BDL	15	
3/25/2003	5	BDL	BDL	BDL	BDL	BDL	BDL	13	230	
10/28/2002	18									
4/30/2002	5.2									
10/23/2001	12									
5/1/2001	28									
11/6/2000	42									
4/4/2000	212									

n=	17	number of observations
Mean=	29	arithmetic mean
SD=	56	standard deviation
K=	2.736	one-sided normal tolerance factor (from table)
TL=	183	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

Zinc concentrations (ug/l) | **Buncombe County New Landfill** | **Tolerance Interval Calculations Spring 2008**

	Background					Compliance Wells							
Date	**MW-1**	**MW-2**	**MW-3**	**MW-4**	**MW-5**	**MW-6**	**MW-7**	**MW-8**	**MW-9**	**MW-10**	**MW-11**	**MW-12**	**MW-13**
3/26/2008	25	BDL	52.2	BDL	BDL	42.9	15.6	12.8	Out of Service	25.8	BDL	BDL	23.6
9/27/2007	38	311*	22.2	12.2	12.4	17.1	26.5	10.7	Out of Service	55	57.6	105	24.7
3/27/2007	19	BDL	21	BDL	BDL	BDL	37	BDL	Out of Service	37	BDL	BDL	19
9/24/2006	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/23/2006	34	330*	120	23	BDL	14	11	BDL	Out of Service	110	40	BDL	18
9/26/2005	5	190*	150	24	11	21	54	BDL	BDL	140	12	BDL	BDL
4/11/2005	16	330*	280*	79	BDL	320*	320*	21	10	370*	BDL	53	
9/27/2004	5	260*	38	22	21	57	23	12	BDL	40	BDL	26	
3/30/2004	5	78	32	27	13	BDL	BDL	14	BDL	21	21	BDL	
9/30/2003	31	120	89	BDL	BDL	290*	99	BDL	BDL	38	11	16	
3/25/2003	5	23	43	BDL	BDL	BDL	14	BDL	BDL	62	14	130	
10/28/2002	48												
4/30/2002	28												
10/23/2001	51												
5/1/2001	37												
11/6/2000	200												
4/4/2000	12.5												
11/2/1999	34												
4/27/1999	55												
11/9/1998	102												
4/14/1998	90												

n=	21	number of observations
Mean=	42	arithmetic mean
SD=	46	standard deviation
K=	2.523	one-sided normal tolerance factor (from table)
TL=	157	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

	Background	Compliance Wells								
Date	**MW-1D**	**MW-2D**	**MW-4D**	**MW-5D**	**MW-8D**	**MW-9D**	**MW-10D**	**MW-11D**	**MW-12D**	**MW-13D**
3/26/2008	BDL	BLD	BLD	22.4	BDL	Out of Service	11.2	28	10.1	16.4
9/27/2007	47	BDL	37.9	20.7	32.3	Out of Service	21.9	13.2	64.5	40.6
3/27/2007	11	BDL	BDL	15	27	Out of Service	BDL	21	BDL	26
9/24/2006	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/23/2006	29	16	120	14	19	Out of Service	22	11	20	33
10/10/2005	48	BDL	28	17	18	BDL	56	12	12	39
4/11/2005	10	BDL	18	32	11	20	20	BDL	79	
9/27/2004	10	16	BDL	79	BDL	BDL	BDL	24	95	
3/30/2004	50	18	14	BDL	BDL	60	BDL	BDL	BDL	
9/30/2003	42	24	12	BDL	BDL	17	16	BDL	20	
3/25/2003	30	BDL	BDL	BDL	30	15	40	16	320*	
10/28/2002	58									
4/30/2002	18									
10/23/2001	33									
5/1/2001	30									
11/6/2000	78									
4/4/2000	195									

n=	17	number of observations
Mean=	46	arithmetic mean
SD=	45	standard deviation
K=	2.736	one-sided normal tolerance factor (from table)
TL=	170	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

Cobalt concentrations (ug/l) | **Buncombe County New Landfill** | **Tolerance Interval Calculations Spring 2008**

	Background	Compliance Wells											
Date	**MW-1**	**MW-2**	**MW-3**	**MW-4**	**MW-5**	**MW-6**	**MW-7**	**MW-8**	**MW-9**	**MW-10**	**MW-11**	**MW-12**	**MW-13**
3/26/2008	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/27/2007	BDL	49.9*	8.5	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	13.3	11.9	BDL
3/27/2007	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	21
9/24/2006	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/23/2006	6.5	81*	37	7	BDL	21	BDL	BDL	Out of Service	5.8	16	6.2	20.0
9/26/2005	6.1	46*	95*	BDL	BDL	21	13	BDL	BDL	5.3	5.8	BDL	18
4/11/2005	2.5	87*	87*	17	BDL	110*	96*	BDL	11	17	BDL	10	
9/27/2004	2.5	75*	18	BDL	BDL	15	12	BDL	BDL	8.5	BDL	11	
3/30/2004	2.5	19	25	6.9	BDL	BDL	6.4	BDL	BDL	BDL	9.8	BDL	
9/30/2003	9	27	44	BDL	BDL	100*	32	BDL	BDL	5.4	BDL	BDL	
3/25/2003	2.5	5.4	21	BDL	BDL	BDL	BDL	BDL	BDL	14	BDL	18	
10/28/2002	15												
4/30/2002	11												
10/23/2001	17												
5/1/2001	30												
11/6/2000	34												
4/4/2000	2.5												
11/2/1999	12												
4/27/1999	19												
11/9/1998	37												
4/14/1998	29												

n=	21	number of observations
Mean=	14	arithmetic mean
SD=	12	standard deviation
K=	2.523	one-sided normal tolerance factor (from table)
TL=	44	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

	Background	Compliance Wells								
Date	**MW-1D**	**MW-2D**	**MW-4D**	**MW-5D**	**MW-8D**	**MW-9D**	**MW-10D**	**MW-11D**	**MW-12D**	**MW-13D**
3/26/2008	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	10
9/27/2007	11	4.2	BDL	BDL	BDL	Out of Service	BDL	BDL	28.8	8.6
3/27/2007	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/24/2006	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/23/2006	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	17
10/10/2005	11	BDL	BDL	BDL	BDL	BDL	19	BDL	BDL	12
4/11/2005	2.5	BDL	BDL	BDL	BDL	BDL	5.9	BDL	15	
9/27/2004	2.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	22	
3/30/2004	2.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
9/30/2003	2.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
3/25/2003	2.5	BDL	BDL	BDL	BDL	BDL	9	BDL	81	
10/28/2002	13									
4/30/2002	2.5									
10/23/2001	2.5									
5/1/2001	33									
11/6/2000	51									
4/4/2000	126									

n=	17	number of observations
Mean=	20	arithmetic mean
SD=	35	standard deviation
K=	2.736	one-sided normal tolerance factor (from table)
TL=	116	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

Vanadium concentrations (ug/l) | **Buncombe County New Landfill** | **Tolerance Interval Calculations Spring 2008**

	Background	Compliance Wells											
Date	**MW-1**	**MW-2**	**MW-3**	**MW-4**	**MW-5**	**MW-6**	**MW-7**	**MW-8**	**MW-9**	**MW-10**	**MW-11**	**MW-12**	**MW-13**
3/26/008	38	BDL	90.4	10.5	13.7	48.1	9.6	11.5	Out of Service	7.8	BDL	BDL	BDL
9/27/2007	40	76.1	22.5	BDL	8.3	7.7	8.36	BDL	Out of Service	9	58.6	91.9	BDL
3/27/2007	25	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/24/2006	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/23/2006	28	92	190*	32	11	18	5.5	BDL	Out of Service	33	30	17	BDL
10/10/2005	2.5	59	100	31	26	29	48	BDL	BDL	22	6.1	9.2	BDL
4/11/2005	6.6	98	540*	110	13	430*	480*	26	7.1	74	BDL	26	
9/27/2004	18	74	37	5.1	25	49	26	14	BDL	46	BDL	24	
3/30/2004	9.1	23	22	38	15	BDL	BDL	15	BDL	18	19	BDL	
9/30/2003	39	30	94	BDL	28	380*	140	7.6	BDL	42	7.9	13	
3/25/2003	13	6.8	66	19	38	BDL	11	7	BDL	69	7.7	45	
10/28/2002	71												
4/30/2002	41												
10/23/2001	75												
5/1/2001	17												
11/6/2000	33												
4/4/2000	2.5												
11/2/1999	34												
4/27/1999	72												
11/9/1998	131												
4/14/1998	105												

n=	21	number of observations
Mean=	40	arithmetic mean
SD=	35	standard deviation
K=	2.523	one-sided normal tolerance factor (from table)
TL=	127	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

	Background	Compliance Wells								
Date	**MW-1D**	**MW-2D**	**MW-4D**	**MW-5D**	**MW-8D**	**MW-9D**	**MW-10D**	**MW-11D**	**MW-12D**	**MW-13D**
3/26/2008	6	BDL	9.7	BLD	BLD	Out of Service	BDL	BDL	15.5	9.6
9/27/2007	14	BDL	BDL	BDL	BDL	Out of Service	5.8	BDL	83.1	BDL
3/27/2007	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	30
9/24/006	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/23/2006	9.1	BDL	B	BDL	BDL	Out of Service	6.6	BDL	17	80
10/10/2005	10	BDL	5.1	BDL	BDL	BDL	27	BDL	16	130*
4/11/2005	2.5	BDL	6.1	BDL	BDL	BDL	9.8	BDL	100	
9/27/2004	2.5	9.9	6.2	BDL	BDL	BDL	BDL	BDL	120	
3/30/2004	6.2	8.2	39	BDL	BDL	6.2	BDL	BDL	BDL	
9/30/2003	7	13	8.6	BDL	BDL	11	BDL	BDL	25	
3/25/2003	2.5	BDL	22	BDL	BDL	BDL	25	BDL	300*	
10/28/2002	13									
4/30/2002	2.5									
10/23/2001	2.5									
5/1/2001	33									
11/6/2000	51									
4/4/2000	126									

n=	17	number of observations
Mean=	19	arithmetic mean
SD=	32	standard deviation
K=	2.736	one-sided normal tolerance factor (from table)
TL=	108	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

Cadmium concentrations (ug/l)

Buncombe County New Landfill

Tolerance Interval Calculations
Spring 2008

	Background	Compliance Wells											
Date	**MW-1**	**MW-2**	**MW-3**	**MW-4**	**MW-5**	**MW-6**	**MW-7**	**MW-8**	**MW-9**	**MW-10**	**MW-11**	**MW-12**	**MW-13**
3/26/2008	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/27/2007	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/27/2007	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/24/2006	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/23/2006	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
10/10/2005	0.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
4/11/2005	0.5	BDL	BDL	BDL	BDL	5.7*	5.1*	BDL	BDL	4.9*	BDL	BDL	
9/27/2004	0.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
3/30/2004	0.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
9/30/2003	0.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
3/25/2003	0.5	BDL	1.5	BDL	BDL	BDL	BDL	BDL	BDL	2.8	BDL	1.8	
10/28/2002	2.7												
4/30/2002	1.4												
10/23/2001	3.1												
5/1/2001	0.5												
11/6/2000	0.5												
4/4/2000	0.5												
11/2/1999	0.5												
4/27/1999	0.5												
11/9/1998	0.5												
4/14/1998	0.5												

n=	21	number of observations
Mean=	1	arithmetic mean
SD=	1	standard deviation
K=	2.523	one-sided normal tolerance factor (from table)
TL=	3	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

	Background	Compliance Wells											
Date	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	MW-11	MW-12	MW-13
3/26/2008	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/27/2007	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/27/2007	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/24/2006	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/23/2006	BDL	6.3*	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
10/10/2005	2.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
4/11/2005	2.5	BDL	9.2*	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
9/27/2004	2.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
3/30/2004	2.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
9/30/2003	2.5	BDL	BDL	BDL	BDL	8*	BDL	BDL	BDL	BDL	BDL	BDL	
3/25/2003	2.5												
10/28/2002	2.5												
4/30/2002	5												
10/23/2001	5												
5/1/2001	5												
11/6/2000	5												
4/4/2000	2.5												
11/2/1999	2.5												
4/27/1999	2.5												
11/9/1998	2.5												
4/14/1998	2.5												

n=	21	number of observations
Mean=	3	arithmetic mean
SD=	1	standard deviation
K=	2.523	one-sided normal tolerance factor (from table)
TL=	5.9	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

	Background	Compliance Wells								
Date	MW-1D	MW-2D	MW-4D	MW-5D	MW-8D	MW-9D	MW-10D	MW-11D	MW-12D	MW-13D
3/26/2008	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/27/2007	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/27/2007	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/24/2006	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/23/2006	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
10/10/2005	2.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
4/11/2005	2.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
9/27/2004	2.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
3/30/2004	2.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
9/30/2003	2.5	BDL	BDL	BDL	BDL	8	BDL	BDL	BDL	
3/25/2003	2.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	7.8	
10/28/2002	2.5									
4/30/2002	5									
10/23/2001	5									
5/1/2001	5									
4/4/2000	2.5									

n=	16	number of observations
Mean=	3	arithmetic mean
SD=	1	standard deviation
K=	2.736	one-sided normal tolerance factor (from table)
TL=	6	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

Carbon disulfide concentrations (ug/l) | **Buncombe County New Landfill** | **Tolerance Interval Calculations Spring 2008**

	Background	Compliance Wells											
Date	**MW-1**	**MW-2**	**MW-3**	**MW-4**	**MW-5**	**MW-6**	**MW-7**	**MW-8**	**MW-9**	**MW-10**	**MW-11**	**MW-12**	**MW-13**
3/26/2008	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/27/2007	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/27/2007	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/23/2006	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/23/2006	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
10/10/2005	1	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
4/11/2005	1	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
9/27/2004	1	2.9	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
3/30/2004	1	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
9/30/2003	1	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
4/14/1998	1	BDL	BDL	32*	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
11/9/1998	1												
4/27/1999	0.5												
11/2/1999	0.5												
4/4/2000	0.5												
11/6/2000	2.5												
5/1/2001	2.5												
10/23/2001	1												
4/30/2002	0.5												
10/28/2002	5												
3/25/2003	5												

n=	21	number of observations
Mean=	2	arithmetic mean
SD=	1	standard deviation
K=	2.523	one-sided normal tolerance factor (from table)
TL=	5	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

	Background	Compliance Wells								
Date	**MW-1D**	**MW-2D**	**MW-4D**	**MW-5D**	**MW-8D**	**MW-9D**	**MW-10D**	**MW-11D**	**MW-12D**	**MW-13D**
3/26/2008	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/27/2007	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/27/2007	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/24/2006	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/23/2006	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/26/2005	1	2	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
4/11/2005	1	BDL	BDL	BDL	3.9	8.4	BDL	BDL	BDL	
9/27/2004	3	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
3/30/2004	1	BDL	BDL	BDL	6.4	BDL	BDL	BDL	BDL	
9/30/2003	6.4	BDL	16	BDL	BDL	BDL	BDL	BDL	BDL	
10/28/2002	14	BDL	BDL	28	BDL	BDL	BDL	BDL	13	
3/25/2003	5									
4/30/2002	5									
4/4/2000	0.5									
10/23/2001	29.9									
5/1/2001	2.5									
11/6/2000	2.5									

n=	17	number of observations
Mean=	6	arithmetic mean
SD=	8	standard deviation
K=	2.736	one-sided normal tolerance factor (from table)
TL=	29	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

Lead concentrations (ug/l) | **Buncombe County New Landfill** | **Tolerance Interval Calculations Spring 2008**

	Background	Compliance Wells										
Date	**MW-1**	**MW-2**	**MW-3**	**MW-4**	**MW-5**	**MW-6**	**MW-7**	**MW-8**	**MW-9**	**MW-10**	**MW-11**	**MW-12**	**MW-13**
3/26/2008	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/27/2007	BDL	27.8*	BDL	BDL	BDL	BDL	BDL	9.4*	Out of Service	5.4	BDL	BDL	BDL
3/27/2007	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/24/2006	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/23/2006	BDL	45*	15*	6.8	BDL	5.5	BDL	BDL	Out of Service	5.3	7.5	5	6.3
9/26/2005	2.5	22*	13	BDL	BDL	6	BDL	BDL	BDL	BDL	BDL	BDL	BDL
4/11/2005	2.5	47*	42*	18*	BDL	30*	12*	BDL	BDL	5.1	BDL	BDL	
9/27/2004	2.5	31*	BDL	BDL	BDL	10	BDL	BDL	BDL	BDL	BDL	BDL	
3/30/2004	2.5	11	BDL	5.9	BDL	BDL	BDL	BDL	BDL	BDL	6.5	BDL	
9/30/2003	2.5	12	6.1	BDL	BDL	34*	6.5	BDL	BDL	BDL	BDL	BDL	
3/25/2003	5												
10/28/2002	5												
4/30/2002	5												
10/23/2001	5												
5/1/2001	5												
11/6/2000	5												
4/4/2000	2												
11/2/1999	2												
4/27/1999	6												
11/9/1998	10												
4/14/1998	2												

n=	21	number of observations
Mean=	4	arithmetic mean
SD=	2	standard deviation
K=	2.523	one-sided normal tolerance factor (from table)
TL=	9	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

	Background	Compliance Wells								
Date	**MW-1D**	**MW-2D**	**MW-4D**	**MW-5D**	**MW-8D**	**MW-9D**	**MW-10D**	**MW-11D**	**MW-12D**	**MW-13D**
3/26/2008	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/27/2007	11	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	6	BDL
3/27/2007	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/24/2006	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/23/2006	9	BDL	6.8	BDL	BDL	Out of Service	BDL	BDL	BDL	7
10/10/2005	13	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	8.9
4/11/2005	2.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	16	
9/27/2004	5	BDL	BDL	BDL	BDL	5.1	BDL	BDL	16	
3/30/2004	6.1	BDL	BDL	BDL	BDL	5.1	BDL	BDL	BDL	
9/30/2003	9.8	BDL	BDL	BDL	BDL	6	BDL	BDL	BDL	
3/25/2003	11									
10/28/2002	5									
4/30/2002	5									
10/23/2001	5									
5/1/2001	5									
11/6/2000	5									
4/4/2000	25									

n=	17	number of observations
Mean=	8	arithmetic mean
SD=	6	standard deviation
K=	2.736	one-sided normal tolerance factor (from table)
TL=	24	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

Antimony concentrations (ug/l) | **Buncombe County New Landfill** | **Tolerance Interval Calculations Spring 2008**

	Background	Compliance Wells											
Date	**MW-1**	**MW-2**	**MW-3**	**MW-4**	**MW-5**	**MW-6**	**MW-7**	**MW-8**	**MW-9**	**MW-10**	**MW-11**	**MW-12**	**MW-13**
3/26/2008	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/22007	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/27/2007	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/24/2006	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/23/2006	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
10/10/2005	2.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
4/11/2005	6.6	BDL	9.2*	BDL	6.8	7.6*	10*	5.2	BDL	5.8	BDL	BDL	
9/27/2004	2.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
3/30/2004	2.5	BDL	BDL	BDL	BDL	BDL	BDL	5.5	BDL	BDL	BDL	BDL	
9/30/2003	2.5	BDL	BDL	BDL	BDL	BDL	BDL	5.5	BDL	BDL	BDL	BDL	
3/25/2003	5												
10/28/2002	5												
4/30/2002	5												
10/23/2001	5												
5/1/2001	5												
11/6/2000	2.5												
4/4/2000	2.5												
11/2/1999	2.5												
4/27/1999	2.5												
11/9/1998	2.5												
4/14/1998	2.5												

n=	21	number of observations
Mean=	4	arithmetic mean
SD=	1	standard deviation
K=	2.523	one-sided normal tolerance factor (from table)
TL=	7	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

	Background	Compliance Wells								
Date	**MW-1D**	**MW-2D**	**MW-4D**	**MW-5D**	**MW-8D**	**MW-9D**	**MW-10D**	**MW-11D**	**MW-12D**	**MW-13D**
3/26/2008	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/27/2007	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/27/2007	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/24/2006	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/23/2006	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
10/10/2005	2.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
4/11/2005	2.5	BDL	BDL	7.9	BDL	BDL	5.8	BDL	BDL	
9/27/2004	2.5	7.7	5.5	BDL	BDL	BDL	BDL	BDL	BDL	
3/30/2004	2.5	7.7	5.5	BDL	BDL	BDL	BDL	BDL	BDL	
9/30/2003	2.5	7.7	5.5	BDL	BDL	BDL	BDL	BDL	BDL	
3/25/2003	5									
10/28/2002	5									
4/30/2002	5									
10/23/2001	5									
5/1/2001	5									
11/6/2000	5									
4/4/2000	2.5									

n=	17	number of observations
Mean=	4	arithmetic mean
SD=	1	standard deviation
K=	2.736	one-sided normal tolerance factor (from table)
TL=	7	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

	Background	Compliance Wells										
Date	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	MW-11	MW-12	MW-13
3/26/2008	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/27/2007	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/27/2007	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/24/2006	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/23/2006	BDL	4*	1.4	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/26/2005	0.5	3*	2.5*	1	BDL	1.3	BDL	BDL	BDL	BDL	BDL	BDL	BDL
4/11/2005	0.5	4.5*	6*	2.3*	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
9/27/2004	0.5	2.5*	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
3/30/2004	0.5												
9/30/2003	0.5												
3/25/2003	1												
10/28/2002	1												
4/30/2002	2												
10/23/2001	1												
5/1/2001	1												
11/6/2000	2.1												
4/4/2000	0.5												
11/2/1999	0.5												
4/27/1999	0.5												
11/9/1998	0.5												
4/14/1998	0.5												

n=	21	number of observations
Mean=	1	arithmetic mean
SD=	1	standard deviation
K=	2.523	one-sided normal tolerance factor (from table)
TL=	2.2	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

	Background	Compliance Wells								
Date	MW-1D	MW-2D	MW-4D	MW-5D	MW-8D	MW-9D	MW-10D	MW-11D	MW-12D	MW-13D
3/26/2008	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/27/2007	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/27/2007	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/24/2006	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/23/206	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/26/2005	0.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1.4
4/11/2005	0.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	2	
9/27/2004	0.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	1.5	
3/30/2004	0.5									
9/30/2003	1.2									
3/25/2003	1									
10/28/2002	1									
4/30/2002	1									
10/23/2001	1									
5/1/2001	1									
11/6/2000	2.7									
4/4/2000	1									

n=	17	number of observations
Mean=	1	arithmetic mean
SD=	1	standard deviation
K=	2.736	one-sided normal tolerance factor (from table)
TL=	3	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

	Background	Compliance Wells										
Date	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	MW-10	MW-11	MW-12	MW-13
3/26/2008	BDL	BDL	BDL	8.3*	BDL	BDL	BDL	9.5*	Out of Service	BDL	BDL	BDL	BDL
9/27/2007	BDL	5.7	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	9*	12.4*	BDL
3/27/2007	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/24/2006	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/23/2006	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/26/2005	5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
4/11/2005	5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
9/27/2004	5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
3/30/2004	5												
9/30/2003	1												
3/25/2003	1												
10/28/2002	1												
4/30/2002	1												
10/23/2001	1												
5/1/2001	1												
11/6/2000	1												
4/4/2000	1												
11/2/1999	1												
4/27/1999	1												
11/9/1998	1												
4/14/1998	1												

n=	21	number of observations
Mean=	2	arithmetic mean
SD=	2	standard deviation
K=	2.523	one-sided normal tolerance factor (from table)
TL=	7	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

	Background	Compliance Wells								
Date	MW-1D	MW-2D	MW-4D	MW-5D	MW-8D	MW-9D	MW-10D	MW-11D	MW-12D	MW-13D
3/26/2008	BDL	BDL	9.8*	BDL	7.8	Out of Service	BDL	BDL	9.2*	BDL
9/27/2007	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	9.2*	BDL
3/27/2007	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/24/2006	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/23/2006	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/26/2005	5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
4/11/2005	5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	
9/27/2004	5	BDL	11*	BDL	BDL	BDL	BDL	BDL	BDL	
3/30/2004	5									
9/30/2003	1									
3/25/2003	1									
10/28/2002	1									
4/30/2002	1									
10/23/2001	1									
5/1/2001	1									
11/6/2000	1									
4/4/2000	1									

n=	17	number of observations
Mean=	2	arithmetic mean
SD=	2	standard deviation
K=	2.736	one-sided normal tolerance factor (from table)
TL=	8	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)

Selenium concentrations (ug/l) | **Buncombe County New Landfill** | **Tolerance Interval Calculations Spring 2008**

	Background	Compliance Wells										
Date	**MW-1**	**MW-2**	**MW-3**	**MW-4**	**MW-5**	**MW-6**	**MW-7**	**MW-8**	**MW-9**	**MW-10**	**MW-11**	**MW-12**	**MW-13**
9/26/2007	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/27/2007	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	12	BDL
3/27/2007	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/23/2006	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
3/23/2006	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	Out of Service	BDL	BDL	BDL	BDL
9/26/2005	2.5	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
4/11/2005	2.5	BDL	BDL	BDL	BDL	16	15	BDL	BDL	BDL	BDL	BDL	
9/27/2004	2.5												
3/30/2004	2.5												
9/30/2003	2.5												
3/25/2003	10.0												
10/28/2002	10.0												
4/30/2002	10.0												
10/23/2001	10.0												
5/1/2001	10.0												
11/6/2000	10.0												
4/4/2000	2.5												
11/2/1999	2.5												
4/27/1999	2.5												
11/9/1998	2.5												
4/14/1998	2.5												

n=	21	number of observations
Mean=	5	arithmetic mean
SD=	4	standard deviation
K=	2.523	one-sided normal tolerance factor (from table)
TL=	14.8	upper tolerance limit = [Mean + (SD x K)]

*indicates contamination (upper tolerance limit exceeded)