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DuPont Engineering

May 16, 2007

Mr. Ethan Brown
NCDENR
Division of Waste Management-Solid Waste Section
1646 Mail Service Center
Raleigh, NC 27699-1646

Re: DuPont Industrial Landfills, NC Solid Waste Landfill Permit No. 10-06
Cape Fear Plant, Leland, NC

Dear Mr. Brown,

DuPont has been sampling groundwater at the Cape Fear site for many years. It has been over 5 years since monitoring requirements under the landfill permit for the DuPont Cape Fear Industrial Landfills have been reviewed. The last review of sampling requirements for monitoring wells at the landfills occurred in 2001, at which time a few changes were made to the target parameter list (see attached letter from NCDENR to DuPont dated November 28, 2001). The letter states that, at that time, the sampling frequency should continue to be semi-annual. Please note that the original Solid Waste Permit, issued on August 13, 1984, calls for annual sampling.

DuPont has been sampling the Cape Fear Landfill monitoring wells for over ten years and has developed a sizable analytical database. A review of the data indicates that conditions are stable and that the landfills do not pose a significant threat to human health or the environment. As a result, DuPont is requesting a modification to the landfill sampling plan. Historical groundwater analytical data over the past ten years is presented in this letter to provide justification for a proposed modification of sampling requirements at the Cape Fear Landfills.

The attached figure shows the locations of monitoring wells at the Cape Fear Landfills (Ash, TPA, and Demolition) and groundwater elevations at each well (measured in October, 2006). Monitoring wells MW-4, MW-5, MW-6 and MW-7 are associated with the Ash Landfill, monitoring wells MW-1, MW-2, MW-3, MW-8 and MW-9 are associated with the TPA landfill and monitoring wells MW-22, MW-23 and MW-24 are associated with the Demolition landfill. Groundwater elevation contours showing groundwater flow direction are also included on this figure.

DATA DESCRIPTION

Groundwater around three industrial landfills located at the Cape Fear site have been sampled and analyzed for volatile organic compounds, semi-volatile organic compounds, various inorganic compounds, and some indicator parameters for over ten years. There are some wells (e.g., MW-1, MW-2, and MW-3) that have been sampled for most of the above compounds since 1984. DuPont, with NCDENR approval, was allowed to modify the sampling program in 2001 as a result of the limited amount of constituents detected in the sampling program. Now, with five

additional years (10 rounds) of analytical data collected since the last sampling modification, DuPont has reviewed the data and believes that a reduction in sampling frequency and list of target analytes can be justified. The data table attached to this letter lists the constituents that have been detected in groundwater that exceeded NC2L standards since 1997. Upon review of the data, you will see that very few constituents have exceeded NC2L standards, and when they have, it has been infrequent. The following sections discuss data presented in the attached table on a landfill specific basis. This letter is then concluded with a request and recommendations for modifying the landfill post-closure monitoring plan.

ASH LANDFILL

Only once since 1997 has there been a detection of a volatile organic compound in groundwater at the Ash Landfill above the NC2L standard (methanol in 1999). Over the same time period, there has been only one semi-volatile organic compound (bis-2(ethylhexyl)phthalate) (BEHP) detected in groundwater slightly above the NC2L standard. BEHP was detected in groundwater above the NC2L standard only three times over the past eleven sampling events when not present in the associated field or laboratory method blank. BEHP is a common laboratory contaminant as verified by its frequent presence in laboratory method blanks and field equipment blanks. Terephthalic Acid (TPA) has been detected in groundwater at downgradient monitoring well MW-6 but this compound has also been typically found in the associated blank samples. Furthermore, when detected, the concentration of TPA was "J" flagged indicating that it is an estimated value between the method detection limit (MDL) and practical quantitation limit (PQL).

In 1997, elevated concentrations of chromium and lead were detected in groundwater at the Ash Landfill. DuPont suspected that these results were due to colloidal particles entrained in the sample due to the sampling technique. Since switching to low-flow sampling techniques using a peristaltic pump in 1998, concentrations of chromium and lead in groundwater have been below NC2L standards. From 1998 to 2001, iron and manganese were detected in groundwater above NC2L standards at concentrations that were consistent over this time period. In the second half of 2001, these metals were removed from the target analyte list with approval from NCDENR. Selenium was detected in groundwater slightly above the NC2L (at MW-6) only twice since 1997.

The following three water quality parameters have exceeded NC2L standards since 1997: chloride in 1998, sulfate in 2002, 2003, and 2006, and total dissolved solids from 1997 to 2006. The concentration of sulfate in groundwater has been consistent over the years and only slightly above the NC2L standard. TDS concentrations in groundwater from downgradient well MW-6 have been consistent over the years, remaining within twice the NC2L standard.

DEMOLITION LANDFILL

There have been very few constituents in groundwater that have exceeded NC2L standards since 1997 at the Demolition Landfill. When not present in an associated blank sample, BEHP was detected four times (1999 to 2002) at concentrations only slightly above the NC2L standard. BEHP has not been detected above the NC2L since 2002. Ethylene glycol and methanol were each only detected once slightly above NC2L standards; in 2004 and 2006, respectively. Lead and fluoride were detected in groundwater above NC2L standards in 1997 only, before switching to low-flow sampling. Iron and Manganese were detected in groundwater above NC2L standards prior to 2001 when they were removed from the target analyte list with approval from NCDENR. TDS was typically detected above the NC2L standard in wells at the Demolition Landfill.

Beryllium, thallium, and vanadium were detected above the laboratory PQL prior to 2001, however, none of these constituents have NC2L standards or Interim Maximum Allowable Concentrations (IMACs). These inorganic compounds were removed from the target analyte list in 2001 with NCDENR approval. There have been low level detections of some volatile organic compounds (VOCs) above the PQL that do not have NC2L or IMAC standards, most recently methyl bromide in 2006. There have been only two detections of TPA (2003 and 2004) at the Demolition Landfill over the past ten years and both times TPA was also found in the associated blank sample ("B" flagged).

TPA LANDFILL

There have been no volatile organic compounds (VOCs) that have exceeded NC2L standards at the TPA Landfill since 2002. In 1999, there were two compounds that were detected slightly above NC2L standards, methanol and methylene chloride. In 2001 and 2002, benzene and total xylenes were detected above NC2L standards at monitoring well MW-8, located within the boundaries of the TPA landfill. Also during these two years toluene and ethylbezene were detected in this well but at concentrations below NC2L standards. However, these VOCs have not been detected in groundwater from MW-8 since 2002. Furthermore, these constituents have not been detected in downgradient monitoring well MW-2. Miscellaneous debris was encountered in the subsurface adjacent to MW-8 during Geoprobe sampling activities conducted during the Phase II RCRA Facility Investigation (see Phase II RFI Report dated August 11, 2000).

When not present in the associated blank, BEHP was detected in groundwater slightly above the NC2L four times since 1997. Although 1,4-dioxane has been detected slightly above the NC2L standard in downgradient monitoring well MW-2, the concentrations have been consistent from 2002 to 2006 (ranging from 8 to 28 ug/L). Note that this compound was added to the target analyte list in 2001. The concentration of 1,4-dioxane in groundwater at monitoring well MW-8 has decreased slightly since 2001. During the same time period, the concentration of 1,4-dioxane at downgradient monitoring well MW-9 has ranged from 23 to 97 ug/L with a slight increase in 2005 and 2006. TPA, 1,1-biphenyl and diphenyl ether have each been detected in groundwater once or twice since 1997 but the concentrations have either been below the NC2L standard (in the case of 1,1-biphenyl) or below the PQL (in the case of TPA and diphenyl ether).

The following inorganic compounds were detected in groundwater above the NC2L standards in 1997: arsenic, chromium, lead, nickel, and fluoride. These compounds have not exceeded NC2L standards since 1997, when low flow sampling techniques were implemented. Iron and manganese were detected in groundwater above NC2L standards from 1997 to 2001. As previously mentioned, iron and manganese were removed from the target analyte list in 2001. The concentration of TDS in groundwater at monitoring well MW-8 has been above (approximately two times) the NC2L standard since 1997.

Antimony and vanadium, two compounds that do not have NC2L standards or IMACs, have not been detected above the PQL since 1997. Vanadium was removed from the target analyte list in 2001. Cobalt and thallium, two other compounds that were removed from the target analyte list in 2001, have been detected above the PQL but they were also detected in an associated blank sample ("B" flagged). Triethylene glycol (TEG) was detected once in groundwater (in 2002) but the concentration was between the MDL and PQL ("J" flagged). TEG does not have an associated NC2L standard or IMAC.

RECOMMENDATIONS

Based on the data presented above along with the consistency of historical groundwater analytical results over the past ten years, DuPont requests that the frequency of sampling at the Ash, TPA, and Demolition Landfills be reduced from semi-annual to annual. Due to its location within the boundaries of the TPA Landfill, DuPont requests the removal of monitoring well MW-8 from the sampling program. In addition, DuPont requests that the target analyte list for the monitoring program at each landfill be modified to include only those constituents shown below.

Ash Landfill

- Semi-volatile organic compound: BEHP
- Inorganic compound: selenium
- Water quality parameters: sulfate and TDS

TPA Landfill

- Semi-volatile organic compounds: BEHP and 1,4-dioxane
- Water quality parameter: TDS

Demolition Landfill

- Semi-volatile organic compounds: BEHP and 1,4-dioxane
- Water quality parameter: TDS

Please feel free to contact me at 704-362-6635 if you have any questions or comments regarding this request to modify the sampling frequency and target analyte list for the Cape Fear Industrial Landfills.

Sincerely,

Kevin Garon
Project Director
DuPont Corporate Remediation Group

cc: Mr. Larry Stanley, NCDENR, HWS
Mr. Winston Price, DAK Americas, LLC
Michelle Thomson, DuPont CRG
File

North Carolina
Department of Environment and Natural Resources

Division of Waste Management

Michael F. Easley, Governor
William G. Ross Jr., Secretary
Dexter R. Matthews, Interim Director

FILE

File

NCDENR

November 28, 2001

Mr. Stephen H. Shoemaker
Senior Consultant
DuPont Corporate Remediation
6324 Fairview Road
Charlotte, N.C. 28210

RE: November 2, 2001, Letter Regarding Water Quality Sampling Target Parameters For The DuPont Cape Fear Landfills Permit Number 10-06

Dear Mr. Shoemaker,

This letter is written in response to our meeting of October 22, 2001, and your letter of November 2, 2001. After a review of the past and present plant operations and resulting waste streams, past disposal practices, and past water quality monitoring data, significant changes to the target parameter list do not appear feasible.

Various inorganic compounds, volatile organic compounds, and semi-volatile organic compounds have been utilized and have been a part of the waste stream at the Cape Fear plant. Some chemical constituents from each of these types of compounds have also appeared in water quality sampling reports. Therefore, only a few changes can be made to the sampling parameter list.

The current sampling parameter list should be modified as follows: The following parameters may be discontinued: Copper, Iron, Manganese, Nitrates, Total Organic Carbon (TOC), and Zinc. The following parameters should be added: 1,4-Dioxane, Ethylene Glycol, Diethylene Glycol, Triethylene Glycol, Diphenyl, and Diphenyl Oxide. Sampling should continue for Terephthalic Acid and Dimethylterephthalate.

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Thus the future sampling parameter list will include:

Field Parameters:	pH Temperature Specific Conductivity
VOCs - Method 8260:	Appendix I List (attached) 1,4-Dioxane
VOCs - Method 8015:	Ethylene Glycol Diethylene Glycol Triethylene Glycol
VOCs:	Terephthalic Acid
Semi-VOCs - 8270:	Standard list to include various phthalates, phenols, Naphthalene, *and also* Diphenyl, Diphenyl Oxide, and Dimethylterephthalate
Other Constituents:	Arsenic, Antimony, Barium, Cadmium, Chromium, Chlorides, Fluorides, Lead, Mercury, Methanol, Selenium, Silver, Sulfates, Total Dissolved Solids

Each of the monitoring wells for the three landfills should be sampled and analyzed semi-annually for the above list of parameters. If you have any questions regarding this letter, please contact me at (919) 733-0692, extension 258.

Sincerely,

Bobby Lutfy

Bobby Lutfy
Hydrogeologist
Solid Waste Section

cc: Jim Coffey
Mark Poindexter
Larry Rose
Larry Stanley

APPENDIX I ORGANIC CONSTITUENTS

ORGANIC CONSTITUENT	PQL (UG/L)	ORGANIC CONSTITUENT	PQL (UG/L)
(16) ACETONE	100	(40) T-1,3-DICHLOROPROPENE	10
(17) ACRYLONITRILE	200	(41) ETHYLBENZENE	5
(18) BENZENE	5	(42) METHYL BUTYL KETONE	50
(19) BROMOCHLOROMETHANE	5	(43) METHYL BROMIDE	10
(20) BROMODICHLOROMETHANE	5	(44) METHYL CHLORIDE	10
(21) BROMOFORM	5	(45) METHYLENE BROMIDE	10
(22) CARBON DISULFIDE	100	(46) METHYLENE CHLORIDE	10
(23) CARBON TETRACHLORIDE	10	(47) MEK; 2-BUTANONE	100
(24) CHLOROBENZENE	5	(48) METHYL IODIDE	10
(25) CHLOROETHANE	10	(49) METHYL ISOBUTYL KETONE	100
(26) CHLOROFORM	5	(50) STYRENE	10
(27) CHLORODIBROMOMETHANE	5	(51) 1,1,1,2-TETRACHLOROETHANE	5
(28) DBCP	25	(52) 1,1,2,2-TETRACHLOROETHANE	5
(29) ETHYLENE DIBROMIDE	5	(53) TETRACHLOROETHYLENE	5
(30) O-DICHLOROBENZENE	5	(54) TOLUENE	5
(31) P-DICHLOROBENZENE	5	(55) 1,1,1,-TRICHLOROETHANE	5
(32) T-1,4-DICHLORO-2-BUTENE	100	(56) 1,1,2-TRICHLOROETHANE	5
(33) 1,1-DICHLOROETHANE	5	(57) TRICHLOROETHYLENE	5
(34) ETHYLENE DICHLORIDE	5	(58) CFC-11	5
(35) VINYLIDENE CHLORIDE	5	(59) 1,2,3-TRICHLOROPROPANE	15
(36) CIS-1,2-DICHLOROETHENE	5	(60) VINYL ACETATE	50
(37) T-1,2-DICHLOROETHENE	5	(61) VINYL CHLORIDE	10
(38) PROPYLENE DICHLORIDE	5	(62) XYLENES	5
(39) CIS-1,3-DICHLOROPROPENE	10		

ALSO KNOWN AS: (21)-TRIBROMOMETHANE, (25)-ETHYL CHLORIDE, (26)-TRICHLOROMETHANE, (27)-DIBROMOCHLOROMETHANE, (28)-1,2-DIBROMO-3-CHLOROPROPANE, (29)-1,2-DIBROMOETHANE, (30)-1,2-DICHLOROBENZENE, (31)-1,4-DICHLOROBENZENE, (33)-ETHYLIDENE CHLORIDE, (34)-1,2-DICHLOROETHANE, (35)-1,1-DICHLOROETHENE (ETHYLENE), (36)-CIS-1,2-DICHLOROETHYLENE, (37)-TRANS-1,2-DICHLOROETHYLENE, (38)-1,2-DICHLOROPROPANE, (42)-2-HEXANONE, (43)-BROMOMETHANE, (44)-CHLOROMETHANE, (45)-DIBROMOMETHANE, (46)-DICHLOROMETHANE, (47)-METHYL ETHYL KETONE, (48)-IODOMETHANE, (49)-4-METHYL-2-PENTANONE, (53)-TETRACHLOROETHENE, PERCHLOROETHYLENE, (55)-METHYLCHLOROFORM, (57)-TRICHLOROETHENE (58)-TRICHLOROFLUOROMETHANE

NC2L Exceedances in Cape Fear Landfill Monitoring Wells since 1997

WELL	SAMPLE DATE	ANALYTE	RESULT	UNITS	NC2L STANDARD	MDL	PQL
MW-2	10/25/2005	1,4-DIOXANE	9.5 J	ug/l	7	1.6	9.8
MW-2	4/5/2006	1,4-DIOXANE	13	ug/l	7	1.6	9.8
MW-2	10/25/2006	1,4-DIOXANE	18	ug/l	7	1.5	9.6
MW-2	3/4/1997	ARSENIC	71	ug/l	50	0.0011	0.010
MW-2	9/30/1997	ARSENIC	89	ug/l	50	0.020	0.020
MW-2	11/7/2002	BIS(2-ETHYLHEXYL) PHTHALATE	9.3 J B	ug/l	2.5	1.3	9.7
MW-2	10/19/2004	BIS(2-ETHYLHEXYL) PHTHALATE	4.2 B	ug/l	2.5	1.3	9.6
MW-2	3/4/1997	CHROMIUM	98	ug/l	50	0.0	0.020
MW-2	7/14/1997	CHROMIUM	320	ug/l	50	0.0	0.050
MW-2	9/30/1997	CHROMIUM	110	ug/l	50	0.013	0.020
MW-2	9/30/1997	FLUORIDE	2530	ug/l	2000	0.040	0.4
MW-2	3/4/1997	IRON	95800	ug/l	300	0.031	0.20
MW-2	7/14/1997	IRON	21900	ug/l	300	0.010	0.20
MW-2	9/30/1997	IRON	185000	ug/l	300	0.020	0.20
MW-2	4/2/1998	IRON	1400	ug/l	300		0.20
MW-2	10/7/1998	IRON	760	ug/l	300		0.20
MW-2	4/6/1999	IRON	3400	ug/l	300		0.20
MW-2	4/5/2000	IRON	2000	ug/l	300	0.021	0.20
MW-2	10/17/2000	IRON	1800	ug/l	300	0.021	0.20
MW-2	3/4/1997	LEAD	21	ug/l	15	0.0029	0.0030
MW-2	7/14/1997	LEAD	50	ug/l	15	0.0029	0.0030
MW-2	9/30/1997	LEAD	38	ug/l	15	0.020	0.020
MW-2	3/4/1997	MANGANESE	790	ug/l	50	0.0013	0.030
MW-2	7/14/1997	MANGANESE	1400	ug/l	50	0.0012	0.030
MW-2	9/30/1997	MANGANESE	1100	ug/l	50	0.0024	0.030
MW-2	4/2/1998	MANGANESE	57	ug/l	50		0.030
MW-2	10/7/1998	MANGANESE	170	ug/l	50		0.030
MW-2	4/6/1999	MANGANESE	520	ug/l	50		0.030
MW-2	4/5/2000	MANGANESE	180	ug/l	50	0.00020	0.030
MW-2	10/17/2000	MANGANESE	150	ug/l	50	0.00020	0.030
MW-2	4/2/2001	MANGANESE	110	ug/l	50	0.00020	0.030

NC2L Exceedances in Cape Fear Landfill Monitoring Wells since 1997

WELL ID	SAMPLE DATE	ANALYTE	RESULT	UNITS	NC2L STANDARD	MDL	PQL
MW-2	7/14/1997	TOTAL DISSOLVED SOLIDS	620000	ug/l	500000	9.1	10
MW-2	9/30/2003	TOTAL DISSOLVED SOLIDS	532000	ug/l	500000	17.8	40.0
MW-22	11/1/1999	BIS(2-ETHYLHEXYL) PHTHALATE	11	ug/l	2.5	6.3	10
MW-22	4/5/2000	BIS(2-ETHYLHEXYL) PHTHALATE	13	ug/l	2.5	6.3	10
MW-22	5/2/2002	BIS(2-ETHYLHEXYL) PHTHALATE	2.6 J	ug/l	2.5	1.8	10
MW-22	10/18/2004	ETHYLENE GLYCOL	8700 J	ug/l	7000	5.2	25
MW-22	9/30/1997	IRON	1400	ug/l	300	0.020	0.20
MW-22	4/1/1998	IRON	2500	ug/l	300		0.20
MW-22	10/7/1998	IRON	890	ug/l	300		0.20
MW-22	4/7/1999	IRON	5800	ug/l	300		0.20
MW-22	9/30/1997	MANGANESE	100	ug/l	50	0.0024	0.030
MW-22	10/24/2006	METHANOL	3800 J	ug/l	3500	1.5	5.0
MW-22	11/7/2002	TOTAL DISSOLVED SOLIDS	2790000	ug/l	500000	17.8	40.0
MW-23	4/4/2001	BIS(2-ETHYLHEXYL) PHTHALATE	5.2 J	ug/l	2.5	2.2	10
MW-23	9/30/1997	IRON	54800	ug/l	300	0.020	0.20
MW-23	4/1/1998	IRON	18200	ug/l	300		0.20
MW-23	4/1/1998	IRON	17500	ug/l	300		0.20
MW-23	10/7/1998	IRON	18200	ug/l	300		0.20
MW-23	4/7/1999	IRON	20100	ug/l	300		0.20
MW-23	11/1/1999	IRON	19500	ug/l	300	0.021	0.20
MW-23	4/6/2000	IRON	20100	ug/l	300	0.021	0.20
MW-23	10/18/2000	IRON	18000	ug/l	300	0.021	0.20
MW-23	4/4/2001	IRON	21300	ug/l	300	0.021	0.20
MW-23	9/30/1997	LEAD	26	ug/l	15	0.020	0.020
MW-23	9/30/1997	MANGANESE	2100	ug/l	50	0.0024	0.030
MW-23	4/1/1998	MANGANESE	790	ug/l	50		0.030
MW-23	4/1/1998	MANGANESE	820	ug/l	50		0.030

NC2L Exceedances in Cape Fear Landfill Monitoring Wells since 1997

WELL	SAMPLE DATE	CHEMICAL NAME	RESULT	UNITS	NC2L STANDARD	MDL	PQL
MW-23	10/7/1998	MANGANESE	780	ug/l	50		0.030
MW-23	4/7/1999	MANGANESE	920	ug/l	50		0.030
MW-23	11/1/1999	MANGANESE	870	ug/l	50	0.00020	0.030
MW-23	4/6/2000	MANGANESE	880	ug/l	50	0.00020	0.030
MW-23	10/18/2000	MANGANESE	830	ug/l	50	0.00020	0.030
MW-23	4/4/2001	MANGANESE	960	ug/l	50	0.00020	0.030
MW-23	4/1/1998	TOTAL DISSOLVED SOLIDS	800000	ug/l	500000		20
MW-23	4/4/2001	TOTAL DISSOLVED SOLIDS	667000	ug/l	500000	13.2	40.0
MW-23	12/14/2001	TOTAL DISSOLVED SOLIDS	504000	ug/l	500000	17.8	40.0
MW-23	5/2/2002	TOTAL DISSOLVED SOLIDS	568000	ug/l	500000	17.8	40.0
MW-23	7/10/2003	TOTAL DISSOLVED SOLIDS	540000	ug/l	500000	17.8	40.0
MW-23	10/7/2003	TOTAL DISSOLVED SOLIDS	539000	ug/l	500000	17.8	40.0
MW-23	3/9/2004	TOTAL DISSOLVED SOLIDS	684000	ug/l	500000	6.8	40.0
MW-23	10/18/2004	TOTAL DISSOLVED SOLIDS	662000	ug/l	500000	6.8	40.0
MW-23	4/7/2005	TOTAL DISSOLVED SOLIDS	733000	ug/l	500000	10.4	40.0
MW-23	10/26/2005	TOTAL DISSOLVED SOLIDS	598000	ug/l	500000	10.4	40.0
MW-23	4/6/2006	TOTAL DISSOLVED SOLIDS	736000 J	ug/l	500000	12.9	40.0
MW-23	10/24/2006	TOTAL DISSOLVED SOLIDS	636000	ug/l	500000	12.9	40.0
MW-24	11/1/1999	BIS(2-ETHYLHEXYL) PHTHALATE	19	ug/l	2.5	6.3	10

NC2L Exceedances in Cape Fear Landfill Monitoring Wells since 1997

WELL	SAMPLED	ANALYTE	RESULT	UNITS	NC2L STANDARD	MDL	PQL
MW-24	11/7/2002	BIS(2-ETHYLHEXYL) PHTHALATE	9.1 J B	ug/l	2.5	1.3	9.7
MW-24	10/18/2004	BIS(2-ETHYLHEXYL) PHTHALATE	17 B	ug/l	2.5	1.3	9.6
MW-24	9/30/1997	FLUORIDE	3920	ug/l	2000	0.040	0.4
MW-24	9/30/1997	IRON	98800	ug/l	300	0.020	0.20
MW-24	4/1/1998	IRON	38700	ug/l	300		0.20
MW-24	4/1/1998	IRON	33700	ug/l	300		0.20
MW-24	10/7/1998	IRON	26300	ug/l	300		0.20
MW-24	4/7/1999	IRON	29700	ug/l	300		0.20
MW-24	11/1/1999	IRON	31800	ug/l	300	0.021	0.20
MW-24	4/6/2000	IRON	28900	ug/l	300	0.021	0.20
MW-24	10/18/2000	IRON	26500	ug/l	300	0.021	0.20
MW-24	4/3/2001	IRON	30300	ug/l	300	0.021	0.20
MW-24	9/30/1997	LEAD	90	ug/l	15	0.020	0.020
MW-24	9/30/1997	MANGANESE	2800	ug/l	50	0.0024	0.030
MW-24	4/1/1998	MANGANESE	1000	ug/l	50		0.030
MW-24	4/1/1998	MANGANESE	1100	ug/l	50		0.030
MW-24	10/7/1998	MANGANESE	1100	ug/l	50		0.030
MW-24	4/7/1999	MANGANESE	1000	ug/l	50		0.030
MW-24	11/1/1999	MANGANESE	1100	ug/l	50	0.00020	0.030
MW-24	4/6/2000	MANGANESE	980	ug/l	50	0.00020	0.030
MW-24	10/18/2000	MANGANESE	900	ug/l	50	0.00020	0.030
MW-24	4/3/2001	MANGANESE	1000	ug/l	50	0.00040	0.060
MW-24	9/30/1997	TOTAL DISSOLVED SOLIDS	920000	ug/l	500000	91	100
MW-3	12/12/2001	1,4-DIOXANE	10 J	ug/l	7	1.6	20
MW-3	10/2/2003	BIS(2-ETHYLHEXYL) PHTHALATE	7.1 J	ug/l	2.5	1.2	9.5
MW-3	7/15/1997	CHROMIUM	53	ug/l	50	0.0	0.010
MW-3	3/4/1997	IRON	1600	ug/l	300	0.031	0.20
MW-3	7/15/1997	IRON	5600	ug/l	300	0.010	0.20
MW-3	9/30/1997	IRON	9200	ug/l	300	0.020	0.20
MW-3	4/2/1998	IRON	3000	ug/l	300		0.20
MW-3	4/2/1998	IRON	2100	ug/l	300		0.20

NC2L Exceedances in Cape Fear Landfill Monitoring Wells since 1997

WELL ID	DATE SAMPLED	ANALYTE	RESULT	UNITS	NC2L STANDARD	MDL	PQL
MW-3	10/7/1998	IRON	1000	ug/l	300		0.20
MW-3	4/6/1999	IRON	1100	ug/l	300		0.20
MW-3	11/2/1999	IRON	1200	ug/l	300	0.021	0.20
MW-3	4/5/2000	IRON	3700	ug/l	300	0.021	0.20
MW-3	10/17/2000	IRON	910	ug/l	300	0.021	0.20
MW-3	4/3/2001	IRON	350	ug/l	300	0.021	0.20
MW-3	7/15/1997	MANGANESE	96	ug/l	50	0.0012	0.030
MW-3	9/30/1997	MANGANESE	110	ug/l	50	0.0024	0.030
MW-3	4/5/2000	MANGANESE	77	ug/l	50	0.00020	0.030
MW-3	7/15/1997	TOTAL DISSOLVED SOLIDS	670000	ug/l	500000	9.1	10
MW-3	11/2/1999	TOTAL DISSOLVED SOLIDS	522000	ug/l	500000	9.1	10.0
MW-3	10/17/2000	TOTAL DISSOLVED SOLIDS	530000	ug/l	500000	13.2	40.0
MW-3	12/12/2001	TOTAL DISSOLVED SOLIDS	548000	ug/l	500000	17.8	40.0
MW-4	4/5/2006	BIS(2-ETHYLHEXYL) PHTHALATE	8.5 J	ug/l	2.5	0.55	9.9
MW-4	7/15/1997	CHROMIUM	350	ug/l	50	0.0	0.050
MW-4	7/15/1997	IRON	62000	ug/l	300	0.010	0.20
MW-4	4/2/1998	IRON	1700	ug/l	300		0.20
MW-4	10/8/1998	IRON	790	ug/l	300		0.20
MW-4	11/3/1999	IRON	1600	ug/l	300	0.021	0.20
MW-4	4/4/2000	IRON	5700	ug/l	300	0.021	0.20
MW-4	7/15/1997	LEAD	81	ug/l	15	0.0058	0.0060
MW-4	7/15/1997	MANGANESE	570	ug/l	50	0.0012	0.030
MW-4	10/8/1998	MANGANESE	100	ug/l	50		0.030
MW-4	11/3/1999	MANGANESE	130	ug/l	50	0.00020	0.030
MW-4	4/4/2000	MANGANESE	110	ug/l	50	0.00020	0.030
MW-4	10/19/2000	MANGANESE	100	ug/l	50	0.00020	0.030
MW-4	4/4/2001	MANGANESE	150	ug/l	50	0.00020	0.030
MW-4	11/3/1999	METHANOL	6500	ug/l	3500	0.32	5.0
MW-4	11/8/2002	SULFATE	310000	ug/l	250000	19.1	100
MW-4	6/26/2003	SULFATE	254000	ug/l	250000	19.1	100
MW-4	10/26/2006	SULFATE	302000 J	ug/l	250000	9.3	50.0

NC2L Exceedances in Cape Fear Landfill Monitoring Wells since 1997

WELL ID	DATE SAMPLED	NAME	RESULT	UNITS	NC2L STANDARD	MDL	PQL
MW-4	7/15/1997	TOTAL DISSOLVED SOLIDS	1400000	ug/l	500000	9.1	10
MW-4	4/4/2000	TOTAL DISSOLVED SOLIDS	511000	ug/l	500000	9.1	10.0
MW-4	10/19/2000	TOTAL DISSOLVED SOLIDS	525000	ug/l	500000	13.2	40.0
MW-4	12/12/2001	TOTAL DISSOLVED SOLIDS	625000	ug/l	500000	17.8	40.0
MW-4	5/1/2002	TOTAL DISSOLVED SOLIDS	579000	ug/l	500000	17.8	40.0
MW-4	11/8/2002	TOTAL DISSOLVED SOLIDS	695000	ug/l	500000	17.8	40.0
MW-4	10/26/2006	TOTAL DISSOLVED SOLIDS	728000	ug/l	500000	12.9	40.0
MW-5	4/4/2000	BIS(2-ETHYLHEXYL) PHTHALATE	640 D	ug/l	2.5	31	50
MW-5	10/2/2003	BIS(2-ETHYLHEXYL) PHTHALATE	3.5 J	ug/l	2.5	1.2	9.5
MW-5	10/26/2006	BIS(2-ETHYLHEXYL) PHTHALATE	6.0 J	ug/l	2.5	0.53	9.6
MW-5	4/2/1998	CHLORIDE - AUTOMATED	3040000	ug/l	250000		100
MW-5	7/15/1997	IRON	20200	ug/l	300	0.010	0.20
MW-5	4/2/1998	IRON	6600	ug/l	300		0.20
MW-5	10/8/1998	IRON	3100	ug/l	300		0.20
MW-5	4/6/1999	IRON	430	ug/l	300		0.20
MW-5	11/3/1999	IRON	1700	ug/l	300	0.021	0.20
MW-5	7/15/1997	MANGANESE	2900	ug/l	50	0.0012	0.030
MW-5	4/2/1998	MANGANESE	160	ug/l	50		0.030
MW-5	10/8/1998	MANGANESE	700	ug/l	50		0.030
MW-5	4/6/1999	MANGANESE	470	ug/l	50		0.030
MW-5	11/3/1999	MANGANESE	120	ug/l	50	0.00020	0.030

NC2L Exceedances in Cape Fear Landfill Monitoring Wells since 1997

WELL ID	SAMPLE DATE	PARAMETER	RESULTS	UNITS	NC2L STANDARD	MDL	PQL
MW-1	4/2/2001	BIS(2-ETHYLHEXYL) PHTHALATE	280	ug/l	2.5	4.3	20
MW-1	10/19/2004	BIS(2-ETHYLHEXYL) PHTHALATE	6.8 B	ug/l	2.5	1.3	9.6
MW-1	10/25/2006	BIS(2-ETHYLHEXYL) PHTHALATE	3.6 B	ug/l	2.5	0.53	9.6
MW-1	7/14/1997	CHROMIUM	1200	ug/l	50	0.0	0.20
MW-1	9/30/1997	CHROMIUM	130	ug/l	50	0.013	0.020
MW-1	7/14/1997	FLUORIDE	2390	ug/l	2000		0.4
MW-1	9/30/1997	FLUORIDE	3210	ug/l	2000	0.030	0.3
MW-1	3/3/1997	IRON	5000	ug/l	300	0.031	0.20
MW-1	7/14/1997	IRON	81200	ug/l	300	0.010	0.20
MW-1	9/30/1997	IRON	62600	ug/l	300	0.020	0.20
MW-1	4/2/1998	IRON	1300	ug/l	300		0.20
MW-1	10/7/1998	IRON	1300	ug/l	300		0.20
MW-1	4/6/1999	IRON	610	ug/l	300		0.20
MW-1	11/2/1999	IRON	950	ug/l	300	0.021	0.20
MW-1	4/5/2000	IRON	1200	ug/l	300	0.021	0.20
MW-1	10/18/2000	IRON	1600	ug/l	300	0.021	0.20
MW-1	4/2/2001	IRON	670	ug/l	300	0.021	0.20
MW-1	3/3/1997	LEAD	21	ug/l	15	0.0058	0.0060
MW-1	7/14/1997	LEAD	70	ug/l	15	0.0029	0.0030
MW-1	9/30/1997	LEAD	25	ug/l	15	0.020	0.020
MW-1	7/14/1997	MANGANESE	350	ug/l	50	0.0012	0.030
MW-1	9/30/1997	MANGANESE	270	ug/l	50	0.0024	0.030
MW-1	11/2/1999	METHANOL	4400 J	ug/l	3500	0.32	5.0
MW-1	7/14/1997	TOTAL DISSOLVED SOLIDS	570000	ug/l	500000	9.1	10
MW-2	4/30/2002	1,4-DIOXANE	8.4 J	ug/l	7	1.6	20
MW-2	7/9/2003	1,4-DIOXANE	11 J	ug/l	7	1.6	20
MW-2	9/30/2003	1,4-DIOXANE	28	ug/l	7	1.5	19
MW-2	3/8/2004	1,4-DIOXANE	11	ug/l	7	1.6	10
MW-2	10/19/2004	1,4-DIOXANE	16	ug/l	7	1.5	9.6
MW-2	4/6/2005	1,4-DIOXANE	12	ug/l	7	1.6	9.8

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NC2L Exceedances in Cape Fear Landfill Monitoring Wells since 1997

WELL ID	DATE SAMPLED	CONTAMINANT	RESULT	UNITS	NC2L STANDARD	MDL	RL
MW-5	4/4/2000	MANGANESE	480	ug/l	50	0.00020	0.030
MW-5	10/19/2000	MANGANESE	650	ug/l	50	0.00020	0.030
MW-5	4/5/2001	MANGANESE	840	ug/l	50	0.00020	0.030
MW-5	11/3/1999	METHANOL	5400	ug/l	3500	0.32	5.0
MW-5	10/2/2003	SELENIUM	67	ug/l	50	0.0026	0.020
MW-5	7/15/1997	TOTAL DISSOLVED SOLIDS	1200000	ug/l	500000	9.1	10
MW-5	12/13/2001	TOTAL DISSOLVED SOLIDS	752000	ug/l	500000	17.8	40.0
MW-5	11/8/2002	TOTAL DISSOLVED SOLIDS	623000	ug/l	500000	17.8	40.0
MW-6	10/19/2000	BIS(2-ETHYLHEXYL) PHTHALATE	5.7 J	ug/l	2.5	2.2	10
MW-6	12/13/2001	BIS(2-ETHYLHEXYL) PHTHALATE	3.4 J B	ug/l	2.5	2.2	10
MW-6	10/19/2004	BIS(2-ETHYLHEXYL) PHTHALATE	15 B	ug/l	2.5	1.3	9.6
MW-6	10/19/2004	BIS(2-ETHYLHEXYL) PHTHALATE	7.3 B	ug/l	2.5	1.3	9.6
MW-6	7/15/1997	IRON	12800	ug/l	300	0.010	0.20
MW-6	7/15/1997	IRON	11400	ug/l	300	0.010	0.20
MW-6	4/2/1998	IRON	5600	ug/l	300		0.20
MW-6	10/8/1998	IRON	3900	ug/l	300		0.20
MW-6	10/8/1998	IRON	4100	ug/l	300		0.20
MW-6	4/6/1999	IRON	6000	ug/l	300		0.20
MW-6	4/6/1999	IRON	5800	ug/l	300		0.20
MW-6	11/2/1999	IRON	4500	ug/l	300	0.021	0.20
MW-6	11/2/1999	IRON	4500	ug/l	300	0.021	0.20
MW-6	4/5/2000	IRON	4400	ug/l	300	0.021	0.20
MW-6	4/5/2000	IRON	4400	ug/l	300	0.021	0.20
MW-6	10/19/2000	IRON	2700	ug/l	300	0.021	0.20
MW-6	10/19/2000	IRON	2700	ug/l	300	0.021	0.20
MW-6	4/4/2001	IRON	4700	ug/l	300	0.021	0.20
MW-6	4/4/2001	IRON	4600	ug/l	300	0.021	0.20
MW-6	7/15/1997	MANGANESE	790	ug/l	50	0.0012	0.030

NC2L Exceedances in Cape Fear Landfill Monitoring Wells since 1997

WELL	SAMPLE DATE	ANALYTE	RESULT	UNITS	15A NCAC 2L STANDARD	MDL	PQL
MW-6	7/15/1997	MANGANESE	910	ug/l	50	0.0012	0.030
MW-6	4/2/1998	MANGANESE	430	ug/l	50		0.030
MW-6	10/8/1998	MANGANESE	440	ug/l	50		0.030
MW-6	10/8/1998	MANGANESE	440	ug/l	50		0.030
MW-6	4/6/1999	MANGANESE	700	ug/l	50		0.030
MW-6	4/6/1999	MANGANESE	680	ug/l	50		0.030
MW-6	11/2/1999	MANGANESE	630	ug/l	50	0.00020	0.030
MW-6	11/2/1999	MANGANESE	640	ug/l	50	0.00020	0.030
MW-6	4/5/2000	MANGANESE	540	ug/l	50	0.00020	0.030
MW-6	4/5/2000	MANGANESE	540	ug/l	50	0.00020	0.030
MW-6	10/19/2000	MANGANESE	450	ug/l	50	0.00020	0.030
MW-6	10/19/2000	MANGANESE	480	ug/l	50	0.00020	0.030
MW-6	4/4/2001	MANGANESE	620	ug/l	50	0.00020	0.030
MW-6	4/4/2001	MANGANESE	610	ug/l	50	0.00020	0.030
MW-6	4/5/2000	SELENIUM	57	ug/l	50	0.0026	0.010
MW-6	7/15/1997	TOTAL DISSOLVED SOLIDS	1100000	ug/l	500000	9.1	10
MW-6	7/15/1997	TOTAL DISSOLVED SOLIDS	1100000	ug/l	500000	9.1	10
MW-6	4/2/1998	TOTAL DISSOLVED SOLIDS	740000	ug/l	500000		10
MW-6	10/8/1998	TOTAL DISSOLVED SOLIDS	638000	ug/l	500000		10.0
MW-6	10/8/1998	TOTAL DISSOLVED SOLIDS	655000	ug/l	500000		10.0
MW-6	4/6/1999	TOTAL DISSOLVED SOLIDS	1010000	ug/l	500000		10.0
MW-6	4/6/1999	TOTAL DISSOLVED SOLIDS	1010000	ug/l	500000		10.0
MW-6	11/2/1999	TOTAL DISSOLVED SOLIDS	922000	ug/l	500000	9.1	10.0

NC2L Exceedances in Cape Fear Landfill Monitoring Wells since 1997

WELL ID	DATE COLLECTED	ANALYTE	RESULT	UNITS	NC2L STANDARD	MDL	PQL
MW-6	11/2/1999	TOTAL DISSOLVED SOLIDS	927000	ug/l	500000	9.1	10.0
MW-6	4/5/2000	TOTAL DISSOLVED SOLIDS	879000	ug/l	500000	9.1	10.0
MW-6	4/5/2000	TOTAL DISSOLVED SOLIDS	874000	ug/l	500000	9.1	10.0
MW-6	10/19/2000	TOTAL DISSOLVED SOLIDS	813000	ug/l	500000	13.2	40.0
MW-6	10/19/2000	TOTAL DISSOLVED SOLIDS	839000	ug/l	500000	13.2	40.0
MW-6	4/4/2001	TOTAL DISSOLVED SOLIDS	996000	ug/l	500000	13.2	40.0
MW-6	4/4/2001	TOTAL DISSOLVED SOLIDS	980000	ug/l	500000	13.2	40.0
MW-6	12/13/2001	TOTAL DISSOLVED SOLIDS	690000	ug/l	500000	17.8	40.0
MW-6	12/13/2001	TOTAL DISSOLVED SOLIDS	690000	ug/l	500000	17.8	40.0
MW-6	5/1/2002	TOTAL DISSOLVED SOLIDS	768000	ug/l	500000	17.8	40.0
MW-6	5/1/2002	TOTAL DISSOLVED SOLIDS	762000	ug/l	500000	17.8	40.0
MW-6	11/8/2002	TOTAL DISSOLVED SOLIDS	765000	ug/l	500000	17.8	40.0
MW-6	11/8/2002	TOTAL DISSOLVED SOLIDS	703000	ug/l	500000	17.8	40.0
MW-6	6/26/2003	TOTAL DISSOLVED SOLIDS	756000	ug/l	500000	17.8	40.0
MW-6	6/26/2003	TOTAL DISSOLVED SOLIDS	742000	ug/l	500000	17.8	40.0
MW-6	10/6/2003	TOTAL DISSOLVED SOLIDS	731000	ug/l	500000	17.8	40.0
MW-6	10/6/2003	TOTAL DISSOLVED SOLIDS	761000	ug/l	500000	17.8	40.0
MW-6	3/3/2004	TOTAL DISSOLVED SOLIDS	849000	ug/l	500000	6.8	40.0

NC2L Exceedances in Cape Fear Landfill Monitoring Wells since 1997

WELL ID	DATE SAMPLED	ANALYTE	RESULT	UNITS	NC2L STANDARD	MDL	PQL
MW-6	3/3/2004	TOTAL DISSOLVED SOLIDS	858000	ug/l	500000	6.8	40.0
MW-6	10/19/2004	TOTAL DISSOLVED SOLIDS	840000	ug/l	500000	6.8	40.0
MW-6	10/19/2004	TOTAL DISSOLVED SOLIDS	872000	ug/l	500000	6.8	40.0
MW-6	4/5/2005	TOTAL DISSOLVED SOLIDS	1090000	ug/l	500000	10.4	40.0
MW-6	4/5/2005	TOTAL DISSOLVED SOLIDS	1100000	ug/l	500000	10.4	40.0
MW-6	10/25/2005	TOTAL DISSOLVED SOLIDS	964000	ug/l	500000	10.4	40.0
MW-6	10/25/2005	TOTAL DISSOLVED SOLIDS	973000	ug/l	500000	10.4	40.0
MW-6	4/4/2006	TOTAL DISSOLVED SOLIDS	1080000	ug/l	500000	12.9	40.0
MW-6	4/4/2006	TOTAL DISSOLVED SOLIDS	980000	ug/l	500000	12.9	40.0
MW-6	10/26/2006	TOTAL DISSOLVED SOLIDS	871000	ug/l	500000	12.9	40.0
MW-6	10/26/2006	TOTAL DISSOLVED SOLIDS	889000	ug/l	500000	12.9	40.0
MW-7	4/7/1999	BIS(2-ETHYLHEXYL) PHTHALATE	44	ug/l	2.5		10
MW-7	4/4/2000	BIS(2-ETHYLHEXYL) PHTHALATE	220	ug/l	2.5	13	20
MW-7	7/15/1997	CHROMIUM	230	ug/l	50	0.0	0.050
MW-7	7/15/1997	IRON	42200	ug/l	300	0.010	0.20
MW-7	4/2/1998	IRON	390	ug/l	300		0.20
MW-7	10/8/1998	IRON	1300	ug/l	300		0.20
MW-7	11/3/1999	IRON	1200	ug/l	300	0.021	0.20
MW-7	4/4/2000	IRON	340	ug/l	300	0.021	0.20
MW-7	10/18/2000	IRON	530	ug/l	300	0.021	0.20
MW-7	7/15/1997	LEAD	50	ug/l	15	0.0029	0.0030
MW-7	7/15/1997	MANGANESE	1300	ug/l	50	0.0012	0.030

NC2L Exceedances in Cape Fear Landfill Monitoring Wells since 1997

WELL ID	SAMPLE DATE	CONTAMINANT	RESULT	UNITS	NC2L STANDARD	MDL	PQL
MW-7	4/2/1998	MANGANESE	72	ug/l	50		0.030
MW-7	10/8/1998	MANGANESE	180	ug/l	50		0.030
MW-7	4/7/1999	MANGANESE	230	ug/l	50		0.030
MW-7	4/4/2000	MANGANESE	230	ug/l	50	0.00020	0.030
MW-7	10/18/2000	MANGANESE	100	ug/l	50	0.00020	0.030
MW-7	4/4/2001	MANGANESE	110	ug/l	50	0.00020	0.030
MW-7	11/3/1999	METHANOL	5000	ug/l	3500	0.32	5.0
MW-8	12/11/2001	1,4-DIOXANE	50	ug/l	7	1.6	20
MW-8	4/29/2002	1,4-DIOXANE	64	ug/l	7	2.0	25
MW-8	11/7/2002	1,4-DIOXANE	60	ug/l	7	1.6	19
MW-8	6/25/2003	1,4-DIOXANE	15 J	ug/l	7	1.6	21
MW-8	10/1/2003	1,4-DIOXANE	37	ug/l	7	1.5	19
MW-8	3/4/2004	1,4-DIOXANE	21	ug/l	7	1.5	9.6
MW-8	10/19/2004	1,4-DIOXANE	31	ug/l	7	1.5	9.6
MW-8	4/6/2005	1,4-DIOXANE	41	ug/l	7	1.6	9.7
MW-8	10/25/2005	1,4-DIOXANE	38	ug/l	7	1.6	10
MW-8	4/5/2006	1,4-DIOXANE	24	ug/l	7	1.6	9.9
MW-8	10/25/2006	1,4-DIOXANE	35	ug/l	7	1.6	9.8
MW-8	7/15/1997	BENZENE	68	ug/l	1	8.1	50
MW-8	12/11/2001	BENZENE	58	ug/l	1	0.38	1.0
MW-8	4/29/2002	BENZENE	83	ug/l	1	0.38	1.0
MW-8	11/7/2002	BENZENE	69	ug/l	1	0.38	1.0
MW-8	10/17/2000	BIS(2-ETHYLHEXYL) PHTHALATE	3.7 J	ug/l	2.5	2.2	10
MW-8	10/1/2003	BIS(2-ETHYLHEXYL) PHTHALATE	3.2 J	ug/l	2.5	1.2	9.5
MW-8	10/19/2004	BIS(2-ETHYLHEXYL) PHTHALATE	4.2 B	ug/l	2.5	1.3	9.6

NC2L Exceedances in Cape Fear Landfill Monitoring Wells since 1997

WELL ID	DATE COLLECTED	ANALYTE	RESULT	UNITS	NC2L STANDARD	MDL	PQL
MW-8	4/6/2005	BIS(2-ETHYLHEXYL) PHTHALATE	5.7 B	ug/l	2.5	1.3	9.7
MW-8	10/25/2006	BIS(2-ETHYLHEXYL) PHTHALATE	2.7 B	ug/l	2.5	0.55	9.8
MW-8	3/3/1997	CHROMIUM	59	ug/l	50	0.0	0.0050
MW-8	7/15/1997	CHROMIUM	100	ug/l	50	0.0	0.010
MW-8	9/30/1997	CHROMIUM	100	ug/l	50	0.013	0.020
MW-8	9/30/1997	FLUORIDE	2330	ug/l	2000	0.040	0.4
MW-8	3/3/1997	IRON	34600	ug/l	300	0.031	0.20
MW-8	7/15/1997	IRON	26100	ug/l	300	0.010	0.20
MW-8	9/30/1997	IRON	61900	ug/l	300	0.020	0.20
MW-8	4/7/1999	IRON	25600	ug/l	300		0.20
MW-8	11/1/1999	IRON	27400	ug/l	300	0.021	0.20
MW-8	4/5/2000	IRON	17300	ug/l	300	0.021	0.20
MW-8	10/17/2000	IRON	19200	ug/l	300	0.021	0.20
MW-8	4/2/2001	IRON	31200	ug/l	300	0.021	0.20
MW-8	9/30/1997	LEAD	67	ug/l	15	0.020	0.020
MW-8	3/3/1997	MANGANESE	980	ug/l	50	0.0013	0.030
MW-8	7/15/1997	MANGANESE	930	ug/l	50	0.0012	0.030
MW-8	9/30/1997	MANGANESE	1600	ug/l	50	0.0024	0.030
MW-8	4/7/1999	MANGANESE	1200	ug/l	50		0.030
MW-8	11/1/1999	MANGANESE	1100	ug/l	50	0.00020	0.030
MW-8	4/5/2000	MANGANESE	950	ug/l	50	0.00020	0.030
MW-8	10/17/2000	MANGANESE	800	ug/l	50	0.00020	0.030
MW-8	4/2/2001	MANGANESE	1100	ug/l	50	0.00040	0.060
MW-8	4/7/1999	METHYLENE CHLORIDE	9.7	ug/l	4.6		1.0
MW-8	9/30/1997	NICKEL	130	ug/l	100	0.015	0.080
MW-8	3/3/1997	TOTAL DISSOLVED SOLIDS	930000	ug/l	500000	0.0	10
MW-8	7/15/1997	TOTAL DISSOLVED SOLIDS	1400000	ug/l	500000	9.1	10
MW-8	9/30/1997	TOTAL DISSOLVED SOLIDS	1200000	ug/l	500000	9.1	10
MW-8	4/7/1999	TOTAL DISSOLVED SOLIDS	840000	ug/l	500000		10.0

NC2L Exceedances in Cape Fear Landfill Monitoring Wells since 1997

WELL ID	SAMPLE DATE	ANALYTE	RESULT	UNITS	NC2L STANDARD	MDL	PQL
MW-8	11/1/1999	TOTAL DISSOLVED SOLIDS	679000	ug/l	500000	9.1	10.0
MW-8	4/5/2000	TOTAL DISSOLVED SOLIDS	1000000	ug/l	500000	9.1	10.0
MW-8	10/17/2000	TOTAL DISSOLVED SOLIDS	978000	ug/l	500000	13.2	40.0
MW-8	4/2/2001	TOTAL DISSOLVED SOLIDS	565000	ug/l	500000	13.2	40.0
MW-8	12/11/2001	TOTAL DISSOLVED SOLIDS	1390000	ug/l	500000	17.8	40.0
MW-8	4/29/2002	TOTAL DISSOLVED SOLIDS	1540000	ug/l	500000	17.8	40.0
MW-8	11/7/2002	TOTAL DISSOLVED SOLIDS	1150000	ug/l	500000	17.8	40.0
MW-8	6/25/2003	TOTAL DISSOLVED SOLIDS	999000	ug/l	500000	17.8	40.0
MW-8	10/1/2003	TOTAL DISSOLVED SOLIDS	1150000	ug/l	500000	17.8	40.0
MW-8	3/4/2004	TOTAL DISSOLVED SOLIDS	1100000	ug/l	500000	6.8	40.0
MW-8	10/19/2004	TOTAL DISSOLVED SOLIDS	1230000	ug/l	500000	6.8	40.0
MW-8	4/6/2005	TOTAL DISSOLVED SOLIDS	1200000	ug/l	500000	10.4	40.0
MW-8	10/25/2005	TOTAL DISSOLVED SOLIDS	1200000	ug/l	500000	10.4	40.0
MW-8	4/5/2006	TOTAL DISSOLVED SOLIDS	1230000	ug/l	500000	12.9	40.0
MW-8	10/25/2006	TOTAL DISSOLVED SOLIDS	1170000	ug/l	500000	12.9	40.0
MW-8	7/15/1997	XYLENES (TOTAL)	2100	ug/l	530	23	50
MW-8	12/11/2001	XYLENES (TOTAL)	620 D	ug/l	530	4.9	10
MW-8	4/29/2002	XYLENES (TOTAL)	1200 D	ug/l	530	9.8	20
MW-8	11/7/2002	XYLENES (TOTAL)	650 D	ug/l	530	4.9	10
MW-8D	7/15/1997	BENZENE	64	ug/l	1	8.1	50
MW-8D	3/3/1997	CHROMIUM	100	ug/l	50	0.0	0.010

NC2L Exceedances in Cape Fear Landfill Monitoring Wells since 1997

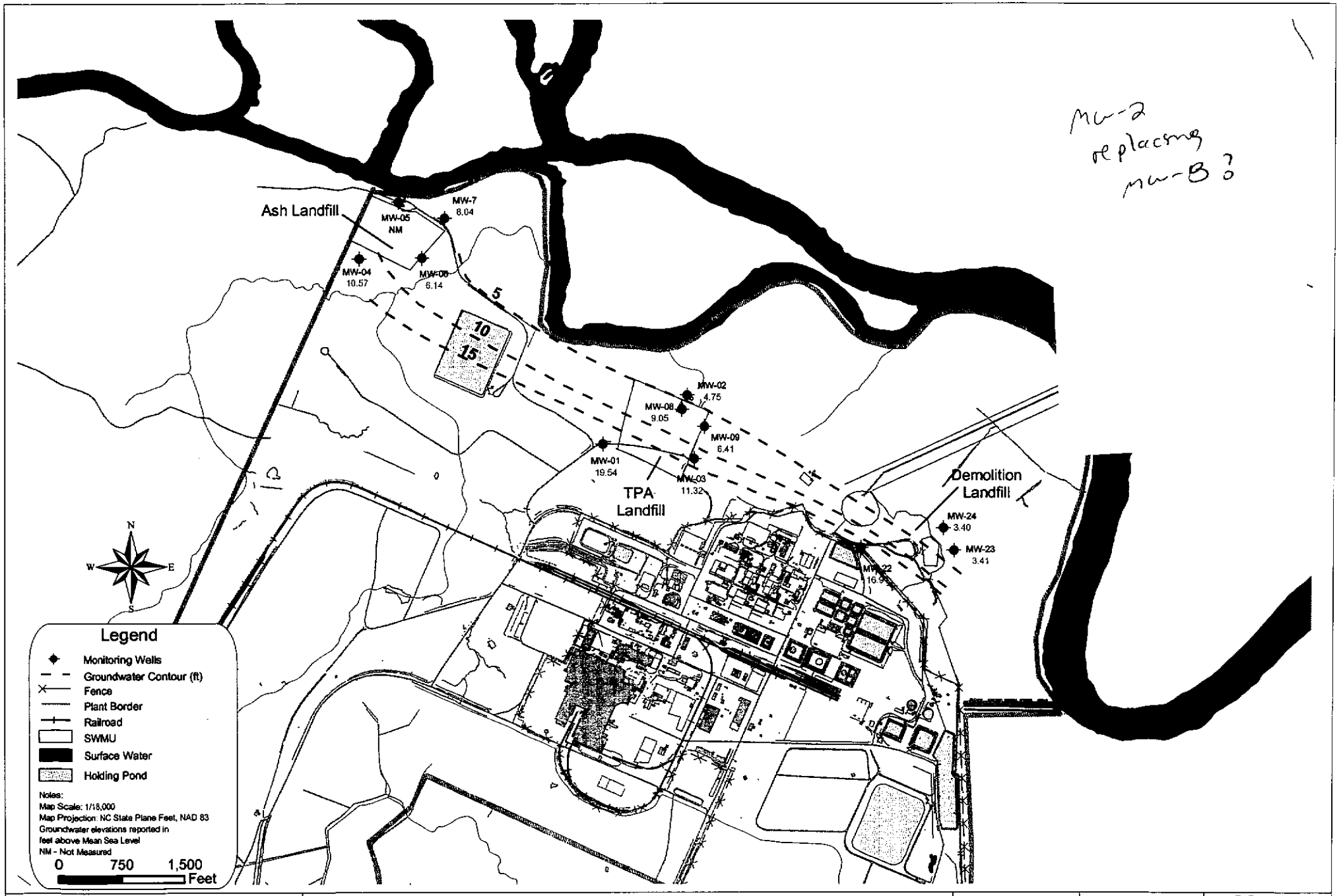
WELL ID	DATE SAMPLED	ANALYTE	RESULT	UNITS	NC2L STANDARD	MDL	PQL
MW-8D	7/15/1997	CHROMIUM	110	ug/l	50	0.0	0.020
MW-8D	3/3/1997	IRON	31700	ug/l	300	0.031	0.20
MW-8D	7/15/1997	IRON	25700	ug/l	300	0.010	0.20
MW-8D	3/3/1997	MANGANESE	1000	ug/l	50	0.0013	0.030
MW-8D	7/15/1997	MANGANESE	970	ug/l	50	0.0012	0.030
MW-8D	3/3/1997	TOTAL DISSOLVED SOLIDS	920000	ug/l	500000	0.0	10
MW-8D	7/15/1997	TOTAL DISSOLVED SOLIDS	1600000	ug/l	500000	9.1	10
MW-8D	7/15/1997	XYLENES (TOTAL)	2000	ug/l	530	23	50
MW-9	12/11/2001	1,4-DIOXANE	40	ug/l	7	1.6	20
MW-9	4/29/2002	1,4-DIOXANE	27	ug/l	7	1.6	20
MW-9	11/7/2002	1,4-DIOXANE	40	ug/l	7	1.5	19
MW-9	6/25/2003	1,4-DIOXANE	23	ug/l	7	1.6	20
MW-9	10/1/2003	1,4-DIOXANE	51	ug/l	7	1.6	20
MW-9	3/4/2004	1,4-DIOXANE	43	ug/l	7	1.5	9.6
MW-9	10/19/2004	1,4-DIOXANE	56	ug/l	7	1.5	9.6
MW-9	4/7/2005	1,4-DIOXANE	55	ug/l	7	1.6	9.8
MW-9	10/25/2005	1,4-DIOXANE	93	ug/l	7	1.6	10
MW-9	4/5/2006	1,4-DIOXANE	70 J	ug/l	7	1.6	9.8
MW-9	10/25/2006	1,4-DIOXANE	97	ug/l	7	1.5	9.6
MW-9	11/2/1999	BIS(2-ETHYLHEXYL) PHTHALATE	10	ug/l	2.5	6.3	10
MW-9	11/7/2002	BIS(2-ETHYLHEXYL) PHTHALATE	9.6 B	ug/l	2.5	1.3	9.6
MW-9	10/1/2003	BIS(2-ETHYLHEXYL) PHTHALATE	5.5 J	ug/l	2.5	1.3	9.8

NC2L Exceedances in Cape Fear Landfill Monitoring Wells since 1997

WELL ID	SAMPLE DATE	PARAMETER	RESULT	UNITS	NC2L STANDARD	MDL	PQL
MW-9	10/19/2004	BIS(2-ETHYLHEXYL) PHTHALATE	31 B	ug/l	2.5	1.3	9.6
MW-9	3/3/1997	CHROMIUM	200	ug/l	50	0.0	0.020
MW-9	7/15/1997	CHROMIUM	120	ug/l	50	0.0	0.020
MW-9	9/30/1997	CHROMIUM	100	ug/l	50	0.013	0.020
MW-9	9/30/1997	CHROMIUM	51	ug/l	50	0.013	0.020
MW-9	9/30/1997	FLUORIDE	2410	ug/l	2000	0.020	0.2
MW-9	9/30/1997	FLUORIDE	3540	ug/l	2000	0.040	0.4
MW-9	3/3/1997	IRON	47400	ug/l	300	0.031	0.20
MW-9	7/15/1997	IRON	35700	ug/l	300	0.010	0.20
MW-9	9/30/1997	IRON	69800	ug/l	300	0.020	0.20
MW-9	9/30/1997	IRON	44600	ug/l	300	0.020	0.20
MW-9	4/1/1998	IRON	12000	ug/l	300		0.20
MW-9	4/1/1998	IRON	11900	ug/l	300		0.20
MW-9	4/1/1998	IRON	10200	ug/l	300		0.20
MW-9	4/1/1998	IRON	10600	ug/l	300		0.20
MW-9	10/7/1998	IRON	13500	ug/l	300		0.20
MW-9	4/6/1999	IRON	10700	ug/l	300		0.20
MW-9	11/2/1999	IRON	9700 MSB	ug/l	300	0.021	0.20
MW-9	4/6/2000	IRON	10200	ug/l	300	0.021	0.20
MW-9	10/17/2000	IRON	9400	ug/l	300	0.021	0.20
MW-9	4/3/2001	IRON	12200 MSB	ug/l	300	0.021	0.20
MW-9	7/15/1997	LEAD	27	ug/l	15	0.0029	0.0030
MW-9	9/30/1997	LEAD	46	ug/l	15	0.020	0.020
MW-9	3/3/1997	MANGANESE	440	ug/l	50	0.0013	0.030
MW-9	7/15/1997	MANGANESE	280	ug/l	50	0.0012	0.030
MW-9	9/30/1997	MANGANESE	430	ug/l	50	0.0024	0.030
MW-9	9/30/1997	MANGANESE	610	ug/l	50	0.0024	0.030
MW-9	4/1/1998	MANGANESE	170	ug/l	50		0.030
MW-9	4/1/1998	MANGANESE	170	ug/l	50		0.030
MW-9	4/1/1998	MANGANESE	160	ug/l	50		0.030
MW-9	4/1/1998	MANGANESE	160	ug/l	50		0.030
MW-9	10/7/1998	MANGANESE	190	ug/l	50		0.030
MW-9	4/6/1999	MANGANESE	180	ug/l	50		0.030
MW-9	11/2/1999	MANGANESE	190 L	ug/l	50	0.00020	0.030
MW-9	4/6/2000	MANGANESE	160	ug/l	50	0.00020	0.030
MW-9	10/17/2000	MANGANESE	170	ug/l	50	0.00020	0.030

NC2L Exceedances in Cape Fear Landfill Monitoring Wells since 1997

WELL ID	DATE COLLECTED	PARAMETER	RESULT	UNITS	NC2L STANDARD	MDL	PQL
MW-9	4/3/2001	MANGANESE	190	ug/l	50	0.00020	0.030
MW-9	11/2/1999	METHANOL	4000 J	ug/l	3500	0.32	5.0
MW-9	9/30/1997	TOTAL DISSOLVED SOLIDS	730000	ug/l	500000	91	100
MW-9	9/30/1997	TOTAL DISSOLVED SOLIDS	630000	ug/l	500000	91	100



CORPORATE REMEDIATION GROUP
An Alliance between
DuPont and URS Corporation - North Carolina
6324 Fairveiw Road
Charlotte, NC 28210

TITLE: Potentiometric Surface Map (October, 2006)
Cape Fear Landfill Semi-Annual Report
DAK Americas Cape Fear Plant
Leland, North Carolina

DRAWN: ND	DATE: 01/05/07	DuPont Project #: 8548
REVISION:	FIGURE NO.:	URSD Project #: 18983997

FILE NAME: G:/CapeFear/Gis/Project_figures/Landfill_Sampling_Annual_Report/2006/CF_Pot_map_10_06.mxd