UNITED STATES ENVIRONMENTAL PROTECTION AGENCY -
NEW ENGLAND, REGION 1
1 CONGRESS ST., SUITE 1100 (HBT), BOSTON, MA 02114-2023

MEMORANDUM

DATE: September 14, 1999

SUBJ: Comments on Dexter Corp.'s, July 1999, Documentation of Environmental Indicator Determination for the American Writing facility (EPA ID No. CTD983895137)

A.G.

FROM: Aaron R. Gilbert, Project Manager/Environmental Engineer
RCRA Corrective Action

TO: Facility File

Following are my comments on the above referenced document. Note, however, that my review was limited primarily to the July 1999 document and did not involve verifying all of Dexter's statement. As a result, until a more thorough review of the site file is conducted I consider these comments Draft.

More importantly, it is worth noting that I concur with the CT DEP's finding that this facility is Stabilized. However, this is so primarily because my State counter-part, Diane Duva, has greater knowledge of the site (especially with respect to the groundwater monitoring data). Nonetheless, I completed a review of the above referenced document and have compiled the following comments.

Finally, I am attaching excerpts from the facility's Annual RCRA Groundwater Monitoring Report for 1996 as this data was not included with the EI Determination.

Current Human Exposures Under Control, CA 725

EI Determination, Question No. 2

1. The text to question No. 2 of the Dexter's EIE determination suggests that "The only constituents in soil samples collected that could potentially pose an unacceptable risk were lead and tetrachloroethylene detected above the media Closure Criteria in soils > 2 ft below surface grade".

   It is important to note that the referenced "Closure Criteria" were never formally approved by EPA.

   Furthermore, although I agree that the TCLP concentrations for lead (in samples 17-1 at 2-4'; 8-10' and 14-16' intervals and 17-2 at the 4-6' interval) and tetrachloroethylene (sample 17-6 at the 2-4' interval) exceed the Pollutant Mobility Criteria for a GA aquifer, since a complete pathway for

exposure to these contaminants does not exist (see EI Determination question no. 3), this site remains stabilized. (These results are simply telling us that, according to the CT RSR's, soil is contaminated and could leach. However, the groundwater data demonstrates that no leaching is actually taking place; the CA 750 EI Determination confirms this.)

2. Note that the tetrachloroethylene concentration for sample 17-8 at the 0-2' interval equals the CT RSR direct exposure criteria for an industrial setting (i.e. there is a reported concentration of 110 ppm). Fortunately though, the CT RSR's are still satisfied given that the concentration does not exceed 110 ppm. In any event, it would be useful at some point in the future (e.g. under an effort to pursue a final remedy) to verify the number of soil samples that were taken to demonstrate compliance with the CT RSR for Soil Remediation. This should be conducted specifically to verify application of the direct exposure criteria, §22a-133k-2(e), which states: Unless an alternative method for determining compliance has been approved..., compliance is achieved when (A) the ninety five percent upper confidence level of the arithmetic mean of all samples is equal to or less than such criterion, provided that the results of no single sample exceeds two times the applicable direct exposure criterion or (B) all results are equal to or less than the applicable direct exposure criterion. (I have yet to verify that these criterion have been met.)

3. The tables of Groundwater monitoring data that are included with EI Determination are not complete (i.e. none of the 1996 GW results are attached).

Migration of Contaminated Groundwater Under Control, CA 750

EI Determination, Question No. 2

4. Here again, the tables of Groundwater monitoring data that are included with the EI determination are not complete as none of the 1996 GW results are attached.

   Furthermore, although likely inconsequential, it appears that either there was matrix interference during analysis or some of the detection limits exceeded the applicable standards that are being used to demonstrate stabilization. For example, the following reported values exceeded (by less than one order of magnitude) the CT RSR standards: cadmium; 1-2 Dichloroethane; Benzene; Vinyl Chloride and TPH (also see Table 4A & 5A of the 1996 GW Monitoring Report, which is located in the facility file, for TPH values).

R-2

Special Study Report

ANNUAL RCRA GROUNDWATER MONITORING REPORT 1996

THE DEXTER CORPORATION
NONWOVENS DIVISION
WINDSOR LOCKS, CONNECTICUT

February 1997
Project # 1178-18-4

MALCOLM
PIRNIE

ENVIRONMENTAL ENGINEERS, SCIENTISTS & PLANNERS

TABLE 1A - 1994-1996 RCRA MONITORING DATA - WELL AW-1
AMERICAN WRITING PAPER CO. UNIT ANALYTICAL DATA

PARAMETER	USEPA CTDPH MCLs	CTDPH Action Levels	CTDEP GWPC	SAMPLING DATE 6/17/93	6/26/95	9/11/95	12/11/95	3/14/96	6/13/96	9/12/96	12/11/96
INORGANIC mg/l											
Arsenic	0.05	0.05	0.05	<0.003	0.007	**0.14**	0.009	0.003	0.007	NA	NA
Barium	2	1	1	0.05	0.04	0.07	0.05	0.06	0.05	NA	NA
Cadmium	0.005	0.005	0.005	<0.005	<0.005	<0.01	<0.05	<0.005	<0.005	NA	NA
Chloride	250			13	12	19	9	10	12	NA	NA
Chromium	0.1	0.05	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	NA
Iron	0.3*			**1.4**	**0.68**	**0.66**	**1.0**	**1.0**	**0.52**	NA	NA
Lead	0.015	0.015	0.015	<0.01	<0.01	<0.01	<0.01	<0.01	0.006	NA	NA
Manganese	0.05*	5		**0.59**	**0.45**	**0.61**	**0.45**	**0.46**	**0.46**	NA	NA
Mercury	0.002	0.002	0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	NA	NA
Selenium	0.05	0.01	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA
Silver	0.05+		0.036	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	NA
Sodium		28		8	9	15	9	9	8	7.7	9
Sulfate	250*	-		18	9	14	9	17	8	NA	NA
Sulfide				<1	<4	<4	<1	<1.0	<1.0	NA	NA
Phenols mg/l			4	<0.005	<0.005	0.008	<0.005	0.008	<0.005	NA	NA
TOC-1 mg/l				7.44	9.49	18.6	17	3.9	19	NA	NA
TOC-2 mg/l	-			4.81	9.35	22.0	15	4.7	9.7	NA	NA
TOC-3 mg/l				7.50	10.9	10.6	14	3.5	11	NA	NA
TOC-4 mg/l				4.40	16.3	16.2	16	3.2	8.4	NA	NA
Mean TOC mg/l				6.04	11.51	16.85	15.5	3.8	12	NA	NA
TPH mg/l		0.05	0.5	<1	<1	<1	<1	**<0.5**	**0.6**	NA	NA
VOCs ug/l											
1,1,1-Trichloroethane	200	200	200	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,2,2-Tetrachloroethane			0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,2-Trichloroethane	5		5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-Dichloroethane			70	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-Dichloroethene	7	7	7	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,3-Trichloropropane			1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2-Dichloroethane	5	1		**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**
1,2-Dichloropropane	5	5	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,4-Dichloro-2-butene				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2-Butanone				<20	<20	<20	<20	<20	<20	<20	<20
2-Chloroethyl Vinyl Ether				<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone				<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-Pentanone				<10	<10	<10	<10	<10	<10	<10	<10
Acetone			700	<100	<100	<100	<100	<100	<100	<100	<100
Acrolein				<25	<25	<25	<25	<25	<25	<25	<25
Acrylonitrile		35	0.5	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	5	1	1	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**
Bromodichloromethane				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Bromoform			4	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Bromomethane				<10	<10	<10	<10	<10	<10	<10	<10
Carbon Disulfide				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon Tetrachloride	5	5	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chlorobenzene	100		100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chlorodibromomethane				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloroethane				<10	<10	<10	<10	<10	<10	<10	<10
Chloroform			6	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloromethane				<10	<10	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene		10	0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dibromomethane				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dichlorodifluoromethane				<2.0	<10	<10	<10	<10	<10	<10	<10
Ethanol				<5000	<5000	<5000	<5000	<5000	<5000	<5000	<5000
Ethyl Methacrylate				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Ethylbenzene			700	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Iodomethane				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Methylene Chloride	5	25	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**10B**	<2.0
Styrene	100		100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Tetrachloroethene	5	5	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Toluene	1,000	1,000	1,000	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
trans-1,2-Dichloroethene	100		5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
trans-1,3-Dichloropropene		10	0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Trichloroethene	5	5	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Trichlorofluoromethane				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Vinyl Acetate				<10	<10	<10	<10	<10	<10	<10	<10
Vinyl Chloride	2	2	2	<10	<10	<10	<10	<10	<10	<10	<10
Xylene	10,000		530	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0

MCL - USEPA Maximum Contaminant Level, secondary MCL (*), or National Drinking Water Regulations (+)

GWPC - CTDEP GA Groundwater Protection Criteria (1/30/96)

B - Result indicative of blank contamination

<2 and 0.56 exceed MCL and/or Action Levels.

NA - Not analyzed

2/25/97

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TABLE 2A - 1994-1996 RCRA MONITORING DATA - WELL AW-2
AMERICAN WRITING PAPER CO. UNIT ANALYTICAL DATA

PARAMETER	USEPA CTDPH MCL	CTDPH GWPC Criteria	[illegible]	SAMPLING DATE [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
INORGANIC mg/l											
Arsenic	0.05	0.05	0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	NA	NA
Barium	2	1	1	0.56	0.55	0.58	0.49	0.60	0.60	NA	NA
Cadmium	0.005	0.005	0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	NA	NA
Chloride	250			17	16	19	17	18	18	NA	NA
Chromium	0.1	0.05	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	NA
Iron	0.3*			**16.2**	**11.1**	**3.8**	**18.3**	**16.8**	**10.1**	NA	NA
Lead	0.015	0.015	0.015	<0.01	<0.01	<0.01	<0.01	<0.01	0.012	NA	NA
Manganese	0.05*	5		**0.79**	**0.48**	**0.26**	**0.49**	**0.69**	**0.52**	NA	NA
Mercury	0.002	0.002	0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	NA	NA
Selenium	0.05	0.01	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA
Silver	0.05+		0.036	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	NA
Sodium		28		22	24	28	28	24	**29**	23.8	**34**
Sulfate	250*			12	18	1	9	27	21	NA	NA
Sulfide				<1	<4	<4	<1	<1.0	2.3	NA	NA
Phenols mg/l			4	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA
TOC-1 mg/l				28.2	78.5	70.7	29	12	22	NA	NA
TOC-2 mg/l				14.9	75.1	68.9	24	17	37	NA	NA
TOC-3 mg/l				28.4	39.5	67.3	50	16	23	NA	NA
TOC-4 mg/l				17.0	47.3	57.1	58	10	15	NA	NA
Mean TOC mg/l				22.1	60.1	66	40	14	24	NA	NA
TPH mg/l		0.05	0.5	**<1**	**<1**	**<1**	**<1**	**<0.5**	**0.5**	NA	NA
VOCs ug/l											
1,1,1-Trichloroethane	200	200	200	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,2,2-Tetrachloroethane			0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,2-Trichloroethane	5		5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-Dichloroethane			70	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-Dichloroethene	7	7	7	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,3-Trichloropropane			1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2-Dichloroethane	5	1		**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**
1,2-Dichloropropane	5	5	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,4-Dichloro-2-butene				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2-Butanone				<20	<20	<20	<20	<20	<20	<20	<20
2-Chloroethyl Vinyl Ether				<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone				<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-Pentanone				<10	<10	<10	<10	<10	<10	<10	<10
Acetone			700	<100	<100	<100	<100	<100	<100	<100	<100
Acrolein				<25	<25	<25	<25	<25	<25	<25	<25
Acrylonitrile		35	0.5	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	5	1	1	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**
Bromodichloromethane				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Bromoform			4	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Bromomethane				<10	<10	<10	<10	<10	<10	<10	<10
Carbon Disulfide				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon Tetrachloride	5	5	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chlorobenzene	100		100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chlorodibromomethane				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloroethane				<10	<10	<10	<10	<10	<10	<10	<10
Chloroform			6	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloromethane				<10	<10	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene		10	0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dibromomethane				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dichlorodifluoromethane				<2.0	<10	<10	<10	<10	<10	<10	<10
Ethanol				<5000	<5000	<5000	<5000	<5000	<5000	<5000	<5000
Ethyl Methacrylate				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Ethylbenzene			700	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Iodomethane				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Methylene Chloride	5	25	5	2.1 B	<2.0	<2.0	<2.0	<2.0	<2.0	**9.7B**	<2.0
Styrene	100		100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Tetrachloroethene	5	5	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Toluene	1,000	1,000	1,000	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
trans-1,2-Dichloroethene	100		5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
trans-1,3-Dichloropropene		10	0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Trichloroethene	5	5	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Trichlorofluoromethane				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Vinyl Acetate				<10	<10	<10	<10	<10	<10	<10	<10
Vinyl Chloride	2	2	2	<10	<10	<10	<10	<10	<10	<10	<10
Xylene	10,000		530	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0

MCL - USEPA Maximum Contaminant Level, secondary MCL (*), or National Drinking Water Regulations (+)

GWPC - CTDEP GA Groundwater Protection Criteria (1/30/96)

B - Result indicative of blank contamination

<2 and 0.56 exceed MCL and/or Action Levels

NA - Not analyzed

TABLE 3A - 1994-1996 RCRA MONITORING DATA - WELL AW-3
AMERICAN WRITING PAPER CO. UNIT ANALYTICAL DATA

PARAMETER	USEPA CTDPH MCL	CTDPH Action Levels	CTDEP GWPC	SAMPLING DATE 3/17/95	6/26/95	9/21/95	12/14/95	3/14/96	6/13/96	9/12/96	12/12/96
INORGANIC mg/l											
Arsenic	0.05	0.05	0.05	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	NA	NA
Barium	2	1	1	0.35	0.30	0.30	0.27	0.38	0.39	NA	NA
Cadmium	0.005	0.005	0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	NA	NA
Chloride	250			18	15	17	16	17	16	NA	NA
Chromium	0.1	0.05	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	NA
Iron	0.3*			4.0	5.1	5.3	6.7	7.9	8.3	NA	NA
Lead	0.015	0.015	0.015	<0.01	<0.01	<0.01	<0.01	0.01	0.006	NA	NA
Manganese	0.05*	5		1.3	1.2	0.95	0.91	1.4	1.5	NA	NA
Mercury	0.002	0.002	0.002	<0.002	<0.002	<0.002	<0.001	<0.003	<0.001	NA	NA
Selenium	0.05	0.01	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA
Silver	0.05+		0.036	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	NA
Sodium		28		16	17	20	16	19	29	21.0	19
Sulfate	250*			<1	<1	1	<1	<1.0	2	NA	NA
Sulfide				<1	<4	<4	<1	<1.0	<1.0	NA	NA
Phenols mg/l			4	<0.005	0.007	<0.005	<0.005	<0.005	<0.005	NA	NA
TOC-1 mg/l				5.43	38.1	42.2	37	17	27	NA	NA
TOC-2 mg/l				6.77	50.0	41.3	38	16	14	NA	NA
TOC-3 mg/l				6.56	63.1	43.2	36	26	12	NA	NA
TOC-4 mg/l				15.6	29.0	47.1	37	28	8.7	NA	NA
Mean TOC mg/l				8.59	45.1	43.5	28	22	15	NA	NA
TPH mg/l		0.05	0.5	<1	<1	<1	<1	<0.5	<0.5	NA	NA
VOCs ug/l											
1,1,1-Trichloroethane	200	200	200	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,2,2-Tetrachloroethane			0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,2-Trichloroethane	5		5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-Dichloroethane			70	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-Dichloroethene	7	7	7	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,3-Trichloropropane			1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2-Dichloroethane	5	1		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2-Dichloropropane	5	5	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,4-Dichloro-2-butene				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2-Butanone				<20	<20	<20	<20	<20	<20	<20	<20
2-Chloroethyl Vinyl Ether				<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone				<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-Pentanone				<10	<10	<10	<10	<10	<10	<10	<10
Acetone			700	<100	<100	<100	<100	<100	<100	<100	<100
Acrolein				<25	<25	<25	<25	<25	<25	<25	<25
Acrylonitrile		35	0.5	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	5	1	1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Bromodichloromethane				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Bromoform			4	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Bromomethane				<10	<10	<10	<10	<10	<10	<10	<10
Carbon Disulfide				5.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon Tetrachloride	5	5	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chlorobenzene	100		100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chlorodibromomethane				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloroethane				<10	<10	<10	<10	<10	<10	<10	<10
Chloroform			6	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloromethane				<10	<10	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene		10	0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dibromomethane				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dichlorodifluoromethane				<2.0	<10	<10	<10	<10	<10	<10	<10
Ethanol				<5000	<5000	<5000	<5000	<5000	<5000	<5000	<5000
Ethyl Methacrylate				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Ethylbenzene			700	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Iodomethane				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Methylene Chloride	5	25	5	2.6 B	<2.0	<2.0	<2.0	<2.0	<2.0	9.7B	<2.0
Styrene	100		100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Tetrachloroethene	5	5	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Toluene	1,000	1,000	1,000	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
trans-1,2-Dichloroethene	100		5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
trans-1,3-Dichloropropene		10	0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Trichloroethene	5	5	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Trichlorofluoromethane				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Vinyl Acetate				<10	<10	<10	<10	<10	<10	<10	<10
Vinyl Chloride	2	2	2	<10	<10	<10	<10	<10	<10	<10	<10
Xylene	10,000		530	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0

MCL - USEPA Maximum Contaminant Level, secondary MCL (*), or National Drinking Water Regulations (+)

GWPC - CTDEP GA Groundwater Protection Criteria (1/30/96)

B - Result indicative of blank contamination

<2 and 0.56 exceed MCL and/or Action Levels.

NA - Not analyzed

2/25/97

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TABLE 4A - 1994-1996 RCRA MONITORING DATA - WELL AW-4
AMERICAN WRITING PAPER CO. UNIT ANALYTICAL DATA

PARAMETER	USEPA CTDEP MCL	CTDPH Action Level	CTDEP GWPC	SAMPLING DATE [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
INORGANIC mg/l											
Arsenic	0.05	0.05	0.05	<0.003	<0.003	0.005	<0.003	<0.003	<0.003	NA	NA
Barium	2	1	1	0.17	0.13	0.11	0.12	0.16	0.14	NA	NA
Cadmium	0.005	0.005	0.005	<0.005	<0.005	<0.01	<0.005	<0.005	<0.005	NA	NA
Chloride	250			24	22	22	20	20	35	NA	NA
Chromium	0.1	0.05	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	NA
Iron	0.3*			17.4	10.5	8.3	8.8	10.5	7.5	NA	NA
Lead	0.015	0.015	0.015	<0.01	<0.01	<0.01	<0.01	<0.01	0.004	NA	NA
Manganese	0.05*	5		1.7	1.6	0.92	1.2	1.3	1.1	NA	NA
Mercury	0.002	0.002	0.002	<0.002	<0.002	<0.002	<0.001	<0.001	<0.001	NA	NA
Selenium	0.05	0.01	0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	NA	NA
Silver	0.05+		0.036	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NA	NA
Sodium		28		47	49	46	45	45	75	66.7	63
Sulfate	250*			15	191	82	133	102	259	NA	NA
Sulfide				<1	<4	<4	<1	<1.0	2.9	NA	NA
Phenols mg/l			4	<0.005	<0.005	0.008	<0.005	0.008	<0.005	NA	NA
TOC-1 mg/l				17.7	31.0	13.5	75	5.6	36	NA	NA
TOC-2 mg/l				10.1	56.9	22.5	49	5.9	22	NA	NA
TOC-3 mg/l				34.6	34.5	8.76	57	9.1	43	NA	NA
TOC-4 mg/l				15.9	45.8	87	57	9.4	40	NA	NA
Mean TOC mg/l				19.6	42.1	33	60	7.5	35	NA	NA
TPH mg/l		0.05	0.5	<1	<1	<1	<1	<0.5	<0.5	NA	NA
VOCs ug/l											
1,1,1-Trichloroethane	200	200	200	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,2,2-Tetrachloroethane			0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,2-Trichloroethane	5		5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-Dichloroethane			70	2.7	<2.0	<2.0	2.9	2.2	2.6	<2.0	4.2
1,1-Dichloroethene	7	7	7	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,3-Trichloropropane			1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2-Dichloroethane	5	1		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2-Dichloropropane	5	5	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,4-Dichloro-2-butene				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2-Butanone				<20	<20	<20	<20	<20	<20	<20	<20
2-Chloroethyl Vinyl Ether				<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone				<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-Pentanone				<10	<10	<10	<10	<10	<10	<10	<10
Acetone			700	<100	<100	<100	<100	<100	<100	<100	<100
Acrolein				<25	<25	<25	<25	<25	<25	<25	<25
Acrylonitrile		35	0.5	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	5	1	1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Bromodichloromethane				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Bromoform			4	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Bromomethane				<10	<10	<10	<10	<10	<10	<10	<10
Carbon Disulfide				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon Tetrachloride	5	5	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chlorobenzene	100		100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chlorodibromomethane				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloroethane				<10	<10	<10	<10	<10	<10	<10	<10
Chloroform			6	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloromethane				<10	<10	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene		10	0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dibromomethane				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dichlorodifluoromethane				<2.0	<10	<10	<10	<10	<10	<10	<10
Ethanol				<5000	<5000	<5000	<5000	<5000	<5000	<5000	<5000
Ethyl Methacrylate				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Ethylbenzene			700	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Iodomethane				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Methylene Chloride	5	25	5	<2.0	<2.0	<2.0	<2.0	<2.0	5.5B	9.0B	2.6
Styrene	100		100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Tetrachloroethene	5	5	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Toluene	1,000	1,000	1,000	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
trans-1,2-Dichloroethene	100		5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
trans-1,3-Dichloropropene		10	0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Trichloroethene	5	5	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Trichlorofluoromethane				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Vinyl Acetate				<10	<10	<10	<10	<10	<10	<10	<10
Vinyl Chloride	2	2	2	<10	<10	<10	<10	<10	<10	<10	<10
Xylene	10,000		530	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0

MCL - USEPA Maximum Contaminant Level, secondary MCL (*), or National Drinking Water Regulations (+)

GWPC - CTDEP GA Groundwater Protection Criteria (1/30/96)

B - Result indicative of blank contamination

<2 and 0.56 exceed MCL and/or Action Levels.

NA - Not analyzed

TABLE 5A - 1994-1996 RCRA MONITORING DATA - WELL AW-5
AMERICAN WRITING PAPER CO. UNIT ANALYTICAL DATA

PARAMETER	USEPA CTDPH MCLs	CTDPH Action Levels	CTDEP GWPC	SAMPLING DATE 3/17/95	6/26/95	9/21/95	12/16/95	3/1/96	6/13/96	9/12/96	12/16/96
INORGANIC mg/l										NA	NA
Arsenic	0.05	0.05	0.05	<0.003	<0.003	NA	<0.003	<0.003	<0.003	NA	NA
Barium	2	1	1	0.14	0.10	NA	0.10	0.11	0.11	NA	NA
Cadmium	0.005	0.005	0.005	<0.005	<0.005	NA	<0.005	<0.005	<0.005	NA	NA
Chloride	250			19	13	NA	22	16	14	NA	NA
Chromium	0.1	0.05	0.05	<0.01	<0.01	NA	<0.01	<0.01	<0.01	NA	NA
Iron	0.3*			**4.9**	**1.8**	NA	**3.0**	**5.5**	**7.9**	NA	NA
Lead	0.015	0.015	0.015	<0.01	<0.01	NA	<0.01	<0.01	0.004	NA	NA
Manganese	0.05*	5		**0.74**	**1.3**	NA	**0.53**	**0.54**	**0.63**	NA	NA
Mercury	0.002	0.002	0.002	<0.002	<0.002	NA	<0.001	<0.001	<0.001	NA	NA
Selenium	0.05	0.01	0.05	<0.005	<0.005	NA	<0.005	<0.005	<0.005	NA	NA
Silver	0.05+		0.036	<0.01	<0.01	NA	<0.01	<0.01	<0.01	NA	NA
Sodium		28		12	13	NA	29	24	24	15.6	26
Sulfate	250*			16	1	NA	47	41	13	NA	NA
Sulfide				<1	<4	NA	<1	<1.0	<1.0	NA	NA
Phenols mg/l			4	<0.005	NA	NA	<0.005	<0.005	<0.005	NA	NA
TOC-1 mg/l				31.8	55.8	73.2	59	7.4	40	NA	NA
TOC-2 mg/l				34.8	55.9	69.6	55	14	36	NA	NA
TOC-3 mg/l				16.1	67.6	61.2	61	16	44	NA	NA
TOC-4 mg/l				39.1	76.6	18.9	63	8.6	42	NA	NA
Mean TOC mg/l				30.5	64.0	55.7	60	12	41	NA	NA
TPH mg/l		0.05	0.5	<1	<1	NA	<1	1	<0.5	NA	NA
VOCs ug/l										NA	NA
1,1,1-Trichloroethane	200	200	200	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,2,2-Tetrachloroethane			0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1,2-Trichloroethane	5		5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-Dichloroethane			70	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,1-Dichloroethene	7	7	7	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2,3-Trichloropropane			1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,2-Dichloroethane	5	1		**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**
1,2-Dichloropropane	5	5	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
1,4-Dichloro-2-butene				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2-Butanone				<20	<20	<20	<20	<20	<20	<20	<20
2-Chloroethyl Vinyl Ether				<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone				<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-Pentanone				<10	<10	<10	<10	<10	<10	<10	<10
Acetone			700	<100	<100	<100	<100	<100	<100	<100	<100
Acrolein				<25	<25	<25	<25	<25	<25	<25	<25
Acrylonitrile		35	0.5	<10	<10	<10	<10	<10	<10	<10	<10
Benzene	5	1	1	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Bromodichloromethane				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Bromoform			4	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Bromomethane				<10	<10	<10	<10	<10	<10	<10	<10
Carbon Disulfide				2.3	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Carbon Tetrachloride	5	5	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chlorobenzene	100		100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chlorodibromomethane				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloroethane				<10	<10	<10	<10	<10	<10	<10	<10
Chloroform			6	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Chloromethane				<10	<10	<10	<10	<10	<10	<10	<10
cis-1,3-Dichloropropene		10	0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dibromomethane				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Dichlorodifluoromethane				<2.0	<10	<10	<10	<10	<10	<10	<10
Ethanol				<5000	<5000	<5000	<5000	<5000	<5000	<5000	<5000
Ethyl Methacrylate				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Ethylbenzene			700	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Iodomethane				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Methylene Chloride	5	25	5	2.2 B	<2.0	<2.0	<2.0	<2.0	2.7B	**9.4B**	2.3
Styrene	100		100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Tetrachloroethene	5	5	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Toluene	1,000	1,000	1,000	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
trans-1,2-Dichloroethene	100		5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
trans-1,3-Dichloropropene		10	0.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Trichloroethene	5	5	5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Trichlorofluoromethane				<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Vinyl Acetate				<10	<10	<10	<10	<10	<10	<10	<10
Vinyl Chloride	2	2	2	<10	<10	<10	<10	<10	<10	<10	<10
Xylene	10,000		530	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0

MCL - USEPA Maximum Contaminant Level, secondary MCL (*), or National Drinking Water Regulations (+)

GWPC - CTDEP GA Groundwater Protection Criteria (1/30/96)

B - Result indicative of blank contamination

<2 and 0.56 exceed MCL and/or Action Levels.

NA - Not analyzed