



DuPont Engineering

November 20, 2002

David P. Watkins
West Virginia Department of Environmental Protection
Division of Water Resources
1201 Greenbrier Street
Charleston, West Virginia 25311-1088

**3Q02 and 4Q02 Public Water Supply Results, West Virginia and Ohio
DuPont Washington Works, Washington, WV**

Dear Mr. Watkins:

Sampling of public water supplies along the Ohio River to determine C-8 concentrations began in December 2001 as required by the Consent Order (Order No. GWR-2001-019). Public water supplies located as far as three and a half miles upstream of the DuPont Washington Works facility and 53 miles downstream have been included in the sampling events. Based on the very low C-8 concentrations measured at the various public water supplies, the number and frequency of sampling events at the public water supplies was reduced by the Groundwater Investigation Steering Team in May 2002. Currently, three public water supplies, Lubeck (West Virginia), Tupper Plains (Ohio) and Little Hocking (Ohio), are sampled on a quarterly basis.

The finalized C-8 results for the 3Q02 and 4Q02 sampling events conducted at Lubeck (West Virginia), Tupper Plains (Ohio) and Little Hocking (Ohio) are presented in Table 1. For the public water supplies that have been sampled more than once, results are presented with the most recent sampling event listed last. Figure 1 shows the locations of all the public water supplies sampled along the Ohio River.

The next sampling event at these Public Water Supply Wells is scheduled for 1Q2003. Please contact me at (302) 992-6820 if you have any questions.

Sincerely,

Andrew S. Hartten
Project Director

cc: GIST Members

Attachments

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O.E.P.A.

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Table 1.
Summary of C-8 in Groundwater
Public Water Supplies, West Virginia and Ohio
Dupont Washington Works, Washington WV

Location	Sample ID	Sample Date	C-8, µg/l	Comments
Parkersburg, WV	PPSDPT	3/6/2002	NQ (<0.050)	Before Treatment Sample
	PPSDAT	3/6/2002	NQ (<0.050)	After Treatment Sample
	PPSDAT	4/25/2002	NQ (<0.050)	After Treatment Sample
	PPSDRANY1	3/6/2002	0.0693	Production Well
	PPSDRANY1	3/6/2002	0.0686	duplicate
	PPSDRANY1	4/25/2002	0.0746	Production Well
	PPSDRANY2	3/6/2002	ND (<0.010)	Production Well
	PPSDRANY3	3/6/2002	ND (<0.010)	Production Well
	PPSDRANY4	3/6/2002	ND (<0.010)	Production Well
	PPSDRANY5	3/6/2002	ND (<0.010)	Production Well
Belpre, OH	BELPSDAT	2/7/2002	0.0818	After Treatment Sample
	BELPSDAT	3/25/2002	0.113	After Treatment Sample
	BELPSDAT	4/23/2002	0.12	After Treatment Sample
	BELPSDPW1	2/7/2002	0.0995	Production Well
	BELPSDPW1	3/25/2002	0.13	Production Well
	BELPSDPW2	2/7/2002	NQ (<0.050)	Production Well
	BELPSDPW2	2/7/2002	NQ (<0.050)	duplicate
	BELPSDPW2	3/25/2002	NQ (<0.050)	Production Well
	BELPSDPW3	3/25/2002	0.141	Production Well
	BELPSDPW3	4/23/2002	0.12	Production Well
	BELPSDPW4	2/7/2002	0.101	Production Well
	BELPSDPW4	3/25/2002	0.133	Production Well
	BELPSDPW4	4/23/2002	0.114	Production Well
	BELPSDPW5	2/7/2002	0.107	Production Well
	BELPSDPW5	3/25/2002	0.103	Production Well
	BELPSDPW5	4/23/2002	0.107	Production Well
	BELPSDPW5	4/23/2002	0.111	duplicate
Blennerhassett Island, WV	BLENI TW0	2/21/2002	ND (<0.010)	Test well
	BLENI TW7	2/21/2002	NQ (<0.050)	Test well
	BLENI W19A	2/21/2002	0.316	Test well
	BLENISLEPS1	1/30/2002	0.165	Drinking Supply Well
Little Hocking, OH	LHPSD1	12/20/2001	1.82	Production Well
	LHPSD1	1/21/2002	1.72	Production Well
	LHPSD1	2/22/2002	2.37	Production Well
	LHPSD1	3/26/2002	2.99	Production Well
	LHPSD1	4/23/2002	2.02	Production Well
	LHPSD1	8/21/2002	3.65	Production Well
	LHPSD1	10/16/2002	3.41	Production Well
	LHPSD2	12/20/2001	3.72	Production Well
	LHPSD2	12/20/2001	3.52	duplicate
	LHPSD2	1/21/2002	2.97	Production Well
	LHPSD2	2/22/2002	2.03	Production Well
	LHPSD2	2/22/2002	2.07	Production Well
	LHPSD2	3/26/2002	3.31	Production Well
	LHPSD2	4/23/2002	3.4	Production Well
	LHPSD2	8/21/2002	4.26	Production Well
	LHPSD2	10/16/2002	3.98	Production Well
	LHPSD3	12/20/2001	0.844	Production Well
	LHPSD3	1/21/2002	0.744	Production Well
	LHPSD3	2/22/2002	0.42	Production Well
	LHPSD3	3/26/2002	0.827	Production Well
	LHPSD3	4/23/2002	0.783	Production Well

Table 1.
Summary of C-8 in Groundwater
Public Water Supplies, West Virginia and Ohio
Dupont Washington Works, Washington WV

Location	Sample ID	Sample Date	C-8 (ug/l)	Comments
Little Hocking, OH (cont.)	LHPSD3	8/21/2002	0.952	
	LHPSD3	10/16/2002	0.495	Production Well
	LHPSD3	10/16/2002	0.434	Production Well
	LHPSD5	12/20/2001	7.66	duplicate
	LHPSD5	1/21/2002	6.22	Production Well
	LHPSD5	1/21/2002	6.14	Production Well
	LHPSD5	2/22/2002	5.69	duplicate
	LHPSD5	3/26/2002	6.57	Production Well
	LHPSD5	4/23/2002	6.11	Production Well
	LHPSD5	8/21/2002	8.09	Production Well
	LHPSD5	10/16/2002	8.58	Production Well
	LHPSDEP001	1/22/2002	1.69	Water System Point
	LHPSDEP001	3/26/2002	2.62	Water System Point
	LHPSDEP001	4/23/2002	1.93	Water System Point
	LHPSDEP001	10/16/2002	4.29	Water System Point
	LHPSDTW1	1/22/2002	2.16	
	LHPSDTW1	8/21/2002	0.81	Test well
	LHPSDTW10	1/21/2002	1.9	Test well
	LHPSDTW10	8/21/2002	1.1	Test well
	LHPSDTW11	1/21/2002	1.41	Test well
	LHPSDTW11	8/21/2002	1.73	Test well
	LHPSDTW12	1/21/2002	0.758	Test well
	LHPSDTW12	8/21/2002	0.824	Test well
	LHPSDTW2	1/22/2002	0.103	Test well
	LHPSDTW2	8/21/2002	0.081	Test well
	LHPSDTW3	1/22/2002	4.48	Test well
	LHPSDTW3	8/21/2002	4.17	Test well
	LHPSDTW4	1/22/2002	37.1	Test well
	LHPSDTW4	3/26/2002	33.3	Test well
	LHPSDTW4	4/23/2002	28.7	Test well
	LHPSDTW4	8/21/2002	12.3	Test well
	LHPSDTW4	10/16/2002	14.5	Test well
	LHPSDTW5	8/21/2002	6.26	Test well
	LHPSDTW6	1/22/2002	1.79	Test well
	LHPSDTW6	8/21/2002	1.15	Test well
	LHPSDTW6	8/21/2002	1.23	duplicate
	LHPSDTW9	1/22/2002	0.364	Test well
	LHPSDTW9	8/21/2002	0.812	Test well
	LHTORCHBS	1/22/2002	1.85	Water System Point
	BARTLETTCC	1/22/2002	1.94	Water System Point
	339B STA	1/22/2002	1.81	Water System Point
General Electric, WV	GE WELL 3	1/3/2002	1.78	Production Well
	GE WELL 3	1/3/2002	1.87	duplicate
	GE WELL 3	2/21/2002	1.75	Production Well
	GE WELL 3	4/26/2002	1.84	Production Well

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Table 1.
Summary of C-8 in Groundwater
Public Water Supplies, West Virginia and Ohio
Dupont Washington Works, Washington WV

Location	Sample ID	Sample Date	C-8 ug/l	Comments
Lubeck, WV	LPSDAT	3/28/2002	0.69	After Treatment Sample
	LPSDAT	4/26/2002	0.652	After Treatment Sample
	LPSDAT	6/24/2002	0.6	After Treatment Sample
	LPSDAT	10/15/2002	0.653	After Treatment Sample
	LPSD WELL A	1/3/2002	0.764	Production Well
	LPSD WELL A	2/21/2002	0.683	Production Well
	LPSD WELL A	3/28/2002	0.796	Production Well
	LPSD WELL A	4/26/2002	0.938	Production Well
	LPSD WELL A	7/24/2002	0.753	Production Well
	LPSD WELL A	10/15/2002	0.856	Production Well
	LPSD WELL B	2/21/2002	0.61	Production Well
	LPSD WELL B	3/28/2002	0.551	Production Well
	LPSD WELL B	4/26/2002	0.532	Production Well
	LPSD WELL B	7/24/2002	0.443	Production Well
	LPSD WELL B	10/15/2002	0.537	Production Well
	LPSD WELL C	1/3/2002	0.592	Production Well
	LPSD WELL C	2/21/2002	0.479	Production Well
	LPSD WELL C	3/28/2002	0.491	Production Well
	LPSD WELL C	4/26/2002	0.471	Production Well
	LPSD WELL C	7/24/2002	0.398	Production Well
	LPSD WELL C	10/15/2002	0.504	Production Well
	LPSD WELL D	1/3/2002	0.758	Production Well
	LPSD WELL D	2/21/2002	0.725	Production Well
	LPSD WELL D	3/28/2002	0.692	Production Well
	LPSD WELL D	4/26/2002	0.506	Production Well
	LPSD WELL D	7/24/2002	0.444	Production Well
	LPSD WELL D	10/15/2002	0.517	Production Well
	LPSD WELL E	1/3/2002	0.332	Production Well
	LPSD WELL E	2/21/2002	1	Production Well
	LPSD WELL E	3/28/2002	1.09	Production Well
	LPSD WELL E	4/26/2002	1.11	Production Well
	LPSD WELL E	7/24/2002	1.02	Production Well
	LPSD WELL E	10/15/2002	1.21	Production Well
	LPSD WELL F	1/3/2002	1.04	Production Well
	LPSD WELL F	2/21/2002	0.313	Production Well
	LPSD WELL F	3/28/2002	0.358	Production Well
	LPSD WELL F	3/28/2002	0.352	duplicate
	LPSD WELL F	4/26/2002	0.332	Production Well
	LPSD WELL F	7/24/2002	0.284	Production Well
	LPSD WELL F	7/24/2002	0.283	duplicate
	LPSD WELL F	10/15/2002	0.355	Production Well
Belleville Hydra Plant, WV	BELLEVILLELD	1/29/2002	NQ (<0.050)	Miscellaneous Use
Tuppers Plains PSD, OH	TPPSDPT	2/6/2002	0.372	Before Treatment Sample
	TPPSDPT	3/25/2002	0.347	Before Treatment Sample
	TPPSDPT	7/23/2002	0.24	Before Treatment Sample
	TPPSDPT	10/15/2002	0.226	Before Treatment Sample
	TPPSDAT	2/6/2002	0.361	After Treatment Sample
	TPPSDAT	3/25/2002	0.358	After Treatment Sample
	TPPSDAT	4/24/2002	0.363	After Treatment Sample
	TPPSDAT	7/23/2002	0.246	After Treatment Sample
	TPPSDAT	10/15/2002	0.268	After Treatment Sample
	TPPSDPW1	2/6/2002	0.726	Production Well
	TPPSDPW1	3/25/2002	0.705	Production Well

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Summary of C-8 in Groundwater
Public Water Supplies, West Virginia and Ohio
Dupont Washington Works, Washington WV

Location	Sample ID	Sample Date	C-8 (ug/l)	Comments
Tuppers Plains PSD, OH (cont.)	TPPSDPW1	4/24/2002	0.702	Production Well
	TPPSDPW1	7/23/2002	0.588	Production Well
	TPPSDPW1	10/15/2002	0.486	Production Well
	TPPSDPW2	2/6/2002	0.417	Production Well
	TPPSDPW2	3/25/2002	0.327	Production Well
	TPPSDPW2	4/24/2002	0.371	Production Well
	TPPSDPW2	7/23/2002	0.235	Production Well
	TPPSDPW2	10/15/2002	0.255	Production Well
	TPPSDPW3	2/6/2002	NQ (<0.050)	Production Well
	TPPSDPW3	3/25/2002	NQ (<0.050)	Production Well
	TPPSDPW3	7/23/2002	ND (<0.010)	Production Well
	TPPSDPW3	10/15/2002	ND (<0.010)	Production Well
	TPPSDPW4	2/6/2002	0.0734	Production Well
	TPPSDPW4	3/25/2002	0.07	Production Well
	TPPSDPW4	7/23/2002	0.052	Production Well
	TPPSDPW4	10/15/2002	0.076	Production Well
	TPPSDPW5	2/6/2002	0.201	Production Well
	TPPSDPW5	3/25/2002	0.201	Production Well
	TPPSDPW5	7/23/2002	0.216	Production Well
	TPPSDPW5	10/15/2002	0.229	Production Well
	TPPSDPW6	2/6/2002	0.649	Production Well
	TPPSDPW6	3/25/2002	0.634	Production Well
	TPPSDPW6	4/24/2002	0.62	Production Well
	TPPSDPW6	7/23/2002	0.62	Production Well
	TPPSDPW6	10/15/2002	0.433	Production Well
Ravenswood Municipal, WV	COR ASIN	3/27/2002	ND (<0.010)	Air Stripper In
	COR ASOUT	3/27/2002	NQ (<0.050)	Air Stripper Out
	COR BLEND AT	3/27/2002	ND (<0.010)	Blend After Treatment
	COR WELL 1	3/27/2002	ND (<0.010)	Production Well
	COR WELL 2	3/27/2002	ND (<0.010)	Production Well
	COR WELL 3	3/27/2002	ND (<0.010)	Production Well
	COR WELL 4	3/27/2002	ND (<0.010)	Production Well
	COR WELL 5	3/27/2002	ND (<0.010)	Production Well
Mason County PSD, WV	MASONCPSD1	1/29/2002	NQ (<0.050)	Production Well
	MASONCPSD1	3/27/2002	NQ (<0.050)	Production Well
	MASONCPSD1	4/25/2002	NQ (<0.050)	Production Well
	MASONCPSD2	1/29/2002	0.0618	Production Well
	MASONCPSD2	3/27/2002	0.0838	Production Well
	MASONCPSD2	4/25/2002	0.0714	Production Well
	MASONCPSD3	1/29/2002	0.0707	Production Well
	MASONCPSD3	3/27/2002	0.102	Production Well
	MASONCPSD3	4/25/2002	0.063	Production Well
Racine Locks and Dam, WV	RACINELD	1/4/2002	0.518	Miscellaneous Use
Village of Racine, OH	VORAT	3/26/2002	ND (<0.010)	After Treatment Sample
	VORRV3	3/26/2002	ND (<0.010)	Production Well
	VORWELL1	3/26/2002	ND (<0.010)	Production Well
	VORWELL2	3/26/2002	ND (<0.010)	Production Well
New Haven Water Dept., WV	NHPSDAT	4/10/2002	ND (<0.010)	After Treatment Sample
	NHPSDPW1	4/10/2002	NQ (<0.050)	Production Well
	NHPSDPW1	4/10/2002	NQ (<0.050)	duplicate

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Table 1.
Summary of C-8 in Groundwater
Public Water Supplies, West Virginia and Ohio
Dupont Washington Works, Washington WV

Location	Sample ID	Sample Date	C-8 ug/l	Comments
Village of Syracuse, OH	VOSAT	3/29/2002	NQ (<0.050)	After Treatment Sample
	VOSAT	4/24/2002	ND (<0.010)	After Treatment Sample
	VOS NORTH 2	3/29/2002	NQ (<0.050)	Production Well
	VOS NORTH 2	4/24/2002	0.491	Production Well
	VOS SOUTH R3	3/26/2002	0.208	Production Well
	VOS SOUTH R3	4/24/2002	ND (<0.010)	Production Well
Village of Pomeroy, OH	VOPAT	3/26/2002	0.0659	After Treatment Sample
	VOPAT	4/24/2002	0.0628	After Treatment Sample
	VOPWELL1	4/24/2002	ND (<0.010)	Production Well
	VOPWELL2	3/26/2002	0.0689	Production Well
	VOPWELL2	4/24/2002	ND (<0.010)	Production Well
	VOPWELL4	3/26/2002	0.0851	Production Well
	VOPWELL4	4/24/2002	0.0712	Production Well

ND = Not Detected at or above the limit of detection (LOD).

The listed LOD is approximate and varies by instrument and over time.

NQ = Not Quantifiable. Detected at a level above the LOD and below the limit of quantification (LOQ).

All C-8 results are reported in ug/l.

Misc. = Miscellaneous water use is not used for drinking.

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