# ENVIRON

May 23, 2001

#### Federal Express

Carl Hoffman New York State Department of Environmental Conservation Bureau of Hazardous Site Control 50 Wolf Road; Room 252 Albany, New York 12233-7010

Re: March 2001 Ground Water Monitoring Results Former Bulova Corporation Facility Valley Stream, New York NYSDEC Site No. 1-30-084

Dear Mr. Hoffman:

ENVIRON International Corporation (ENVIRON) has prepared this letter, on behalf of Bulova Corporation (Bulova), to present results of the ground water monitoring activities completed during March 2001 at the former Bulova facility in Valley Stream, New York (the "Site"). The ground water monitoring activities completed during March 2001 represent the fourth quarterly sampling event to be performed during a two-year monitoring period. The following sections briefly summarize the results of these activities. As detailed in the *Operation and Maintenance Plan*, ENVIRON will prepare a report regarding the on-going monitoring activities following the two-year monitoring period.

The quarterly monitoring activities completed during March 2001 included the measurement of ground water levels at seven monitoring wells (MW-HD1 through MW-HD7) and the collection of ground water samples from four monitoring wells (MW-HD2, MW-HD4, MW-HD6, and MW-HD7). Activities completed during the March 2001 monitoring event were performed in accordance with the procedures detailed in the *Operation and Maintenance Plan* (ENVIRON, March 2000/May 24, 2000).

Ground water elevation data is summarized in Table 1 and presented on Figures 1 and 2. Consistent with the results of prior investigations, ground water level measurements collected during March 2001 indicate that local ground water flow at the Site is directed toward the southeast at a very small hydraulic gradient of less than 0.002 ft/ft. The ground water elevation at off-site monitoring well MW-HD7 indicates that regional ground water flow may be directed toward the south/southwest.

The March 2001 ground water sampling results are generally consistent with the results of the prior (December 2000) monitoring event at the Site and, with the exception of Freon 113, the VOCs concentrations continue to display an overall decreasing trend. The March 2001 sampling results are summarized in Table 2. Historical site-related VOC concentrations at MW-HD4 are depicted on Figures 3 and 4. As detailed in prior reports submitted to the New York State Department of Environmental Conservation (NYSDEC), the Freon concentration patterns and the recent timing of the Freon detections indicate that the reported Freon concentrations are likely related to activities subsequent to Bulova's ownership and operation of the Site.

A Data Usability Summary Report associated with the March 2001 sampling event is provided in Attachment A. Based on ENVIRON's review, all samples were successfully analyzed for the requested compounds with the exception of the reported Freon 113 concentration in the ground water sample collected from off-site monitoring well MW-HD7. The sample from MW-HD7 was analyzed directly after the ground water sample collected from on-site monitoring well MW-HD6. Based on ENVIRON's review, the reported Freon 113 concentration in the sample from MW-HD7 is believed to be a laboratory artifact (as a result of carryover within the analytical instruments) and not an indication of Freon-impacted ground water at MW-HD7.

Please contact us at your earliest convenience to discuss any questions or comments regarding the quarterly monitoring activities. The next quarterly monitoring event is scheduled for June 2001.

Sincerely,

Thomas V. Fusillo Principal

Michael J. Potts Manager

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Attachments

cc: C. Montroy (NYSDEC) B. Weber (Bulova)

# TABLES

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TABLE 1 Ground Water Elevation Data Former Bulova Corporation Facility – Valley Stream, New York					
Monitoring Well	Top of Casing Elevation (ft AMSL)	March 2 Depth to Water (ft TOC)	1, 2001 Elevation (ft AMSL)		
MW-HD1	9.93	5.28	4.65		
MW-HD2	9.45	4.58	4.87		
MW-HD3	9.93	5.27	4.66		
MW-HD4	10.09	5.67	4.42		
MW-HD5	9.45	5.00	4.45		
MW-HD6	9.97	5.67	4.30		
MW-HD7	9.33	4.71	4.62		
Notes: 1. Abbreviations: TOC: Top of casing AMSL: Above reserved back					
AMSL: Above mea	n sea levei				

	Summary of r	ammary of March 2001 Ground water Sampling Results				
	Former Bulova (	ulova Corporation Facility - Valley Stream, New York				
Location Sample Collection Date Sample Method Comments	MW-HD2 3/21/01 Bailer	MW-HD4 3/21/01 Bailer	MW-HD4 3/21/01 Bailer Duplicate	MW-HD6 3/21/01 Bailer	MW-HD7 3/21/01 Bailer	New York Ambient Water Quality Criteria
Volatile Organic Compounds						
Chlorobenzene	10.6	ND	ND	0.67 (j)	ND	5
1,2-Dichlorobenzene	ND	0.44 (j)	0.38 (j)	6	ND	3
1,4-Dichlorobenzene	ND	1 (j)	1 (j)	16.3	ND	3
1,1-Dichloroethane	ND	28	27.7	6	ND	5
1,1-Dichloroethene	ND	95.9	97.2	6.4	ND	5
cis-1,2-Dichloroethene	ND	4 (j)	3.9 (j)	ND	ND	5
Freon 113	ND	222	224	766	4.3 (j)*	5
Tetrachloroethene	ND	4.9	4.9	9.4	ND	5
1,1,1-Trichloroethane	ND	53.4	53.4	11.8	ND	5
Trichloroethene	ND	16	15.9	5	2.3	5

#### TABLE 2 of Mauch 2001 Crowned Water Samuling Decult С.

Notes:

1. All concentrations are reported in micrograms per liter ( $\mu$ g/L) (parts pc.

Only targeted compounds detected in one or more samples are listed in this table. Bold values meet or exceed the New Viet 1 to 12.

Bold values meet or exceed the New York Ambient Water Quality Criteria. 3.

4. Abbreviations:

ND = Not Detected

(j) = Estimated Concentration ¥

= Suspected laboratory artifact and believed to be unrelated to ground water quality at MW-HD7

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# **FIGURES**









# ATTACHMENT A

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### Data Usability Summary Report

### DATA USABILITY SUMMARY REPORT (DUSR) BULOVA: VALLEY STREAM SAMPLING EVENT – MARCH 2001

### I. INTRODUCTION

During these sampling events, a total of seven aqueous samples, including wash and trip blanks were collected by ENVIRON and submitted to Accutest Laboratories in Dayton, New Jersey for analysis. The aqueous samples were analyzed for priority pollutant volatile organics (VOC) plus Freon 113 using SW846 Method 8260. Accutest prepared one data package (Job Number E87854) using the Category B Deliverables for New York Analytical Services Protocol (ASP).

ENVIRON reviewed the analytical and quality assurance/quality control (QA/QC) results contained in the data packages as well as the raw data. The data validation procedure and criteria were based on the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (February 1994), and the appropriate methods where applicable. The USEPA data qualifiers used in this report are listed in Table 1.

Overall, the data is acceptable. The data package provided by Accutest met the requirements for a DUSR. No data transfer deviations were identified.

The description of the data review is in Section II and summarizes the problems detected that required the qualification of data. All samples were successfully analyzed for the requested analyses. Note that the Freon 113 concentration reported for sample MWHD7-010321 is suspect and might be the result of carryover between samples (see part H, **Compound Identification, Quantitation and Detection Limits**)

TABLE 1				
Data Qualifier Definitions				
The following definitions provide brief explanations of the national qualifiers assigned to				
results in the data review process.				
U	The analyte was analyzed for, but was not detected above, the reported sample quantitation limit.			
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.			
N	The analysis indicates the presence of any analyte for which there is presumptive evidence to make a "tentative identification."			
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.			
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.			
R	The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.			

### VOLATILE ORGANIC ANALYSIS (SW846 Method 8260)

#### A. Technical Holding Time

The holding time requirement was met for all samples.

#### **B.** Instrument Performance Check

All field samples were analyzed within the 12 hour period following the injection of the BFB. Method 8260 requires analysis within 12 hours of the instrument performance check.

#### C. Calibration

#### **Initial Calibration**

No problems were identified during this review.

#### **Continuing Calibration**

No problems requiring data qualification were identified during this review.

#### D. Blanks

No problems were identified during this review.

#### E. Surrogate Standards

No problems requiring the qualification of data were identified during this review.

#### F. Matrix Spike/Matrix Spike Duplicate/Blank Spike (MS/MSD/BS)

The MS/MSD/BS analyses are used to determine long-term precision and accuracy of the analytical method for various matrices and/or sites. MS/MSD analyses are not used by themselves to qualify data points but are used in conjunction with other QC data to determine data usability issues.

No problems requiring the qualification of data were identified during this review.

#### G. Internal Standards

No problems were identified during this review.

#### H. Compound Identification, Quantitation and Detection Limits

**Sample MWHD7-010321:** The concentration of Freon 113 reported for this sample (4.3J  $\mu g/l$ ) is suspect and should be used with caution. This result may be carryover from the undiluted analysis of sample MWHD6-010321. This sample was run directly before sample MWHD7 with no laboratory blank between samples. The on-column concentration for sample MWHD6 for Freon 113 is 844  $\mu g/l$ . The spectra for Freon 113 provided in the data package shows a certain amount of peak splitting indicating possible system saturation. The laboratory analyzed MWHD6 at a five-times dilution factor but did not reanalyze sample MWHD7 for possible carryover.

### I. Overall Data Assessment Data quality is acceptable.

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