12 Metro Park Road, Albany, New York 12205

July 10, 2001

COPY

Mr. David Crosby
Senior Engineer
New York State Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-7010

RE: Former Miller Container Site (No. 7-38-029)
GWTF Modification Work Plan
Effluent Stack Upgrade and Vapor Phase Carbon Removal

Telephone
518.458.1313
Facsimile
518.458.2472

Dear Mr. Crosby:

Per our discussion on Thursday, May 31, 2001 regarding the above referenced site, and as presented in our correspondence of May 29, 2001, Item No. 1, Earth Tech is presenting the following justification and work plan to modify the GWTF vapor effluent stack. The Miller Brewing Company and Earth Tech propose to upgrade the current stack design by extending it 10 feet in height. This engineering modification will allow the discontinuance of the use of vapor phase, carbon treatment at the GWTF. Please find attached three vapor effluent models (Air Guide – 1 Software Program, Version 3.1) for the site produced in support of this proposal. Also, please find attached a copy of a wind rose for the Syracuse area down loaded from the Internet. No wind rose was readily available for the City of Fulton, however owing to the proximity of these two cities, this data is considered to be responsive to your request.

All three models were prepared with the following common parameters:

- Treatment system loading calculated using May 2000 to May 2001 average influent flow rate (34.42 gpm) and the various individual compound, system influent concentrations (see attached Table 1). The loading calculation is as follows:

  Loading (lbs/hour)
  = Flow (gal./min)*60* Concentration (ppm)*(8.34 (lbs/gal. H_2O) / 1,000,000)

  Loading (lbs/year)
  = Loading (lbs/day)*24*365

- Actual effluent stack diameter (20 inches).
- Actual stack height plus 10 feet (30 feet total).
- Actual projected stack height over treatment building (12 feet).

- Actual average, stack velocity measured for models reported in 1999-2000 annual report (9.4 ft/min).
- Calculated stack flow rate (1089 ft^3/min)= $\pi r^2(ft^2)$*velocity (ft/min).
- Estimated latitude and longitude of the facility stack.
- Actual dimensions of the treatment facility.
- Actual distance to nearest Chrysteel property line (65 ft.)

The three models present the "Actual Conditions", "Project Maximum" conditions and the "Maximum Since January 1998" conditions. For the " Actual Conditions" model, all positive contaminant results measured in the GWTF influent sample collected in April 2001 were used for loading calculations. The Project Maximum model uses all highest positive results measured in the influent samples since February 27, 1997 (start of project). The final model was prepared using the maximum concentrations measured in the influent since January 28, 1998.

Model Results

The contaminant impact summaries are located on page 4 of each of the three model reports. This page lists the contaminants of concern by CAS number, the Annual Guidance Concentration (AGC) and Short Term Guidance Concentration (SGC) for each contaminant, and the calculated percentage of these guidance values the model predicts based on the inputted loading values. Models expressing summary totals of less than 100% indicate that the point source is in compliance with the current guidance impact limitations.

These reports indicate that with a 10-foot height extension added to the vapor stack, the Former Miller facility GWTF would exhibit 32.5% of the AGC and less than 1% of the SGC for the total loading to the facility. Thus, the facility would meet Air Guide – 1 requirements for removal of vapor phase contaminants prior to discharge. The prevailing contaminant of concern is 1,1-dichloroethene (vinylidene chloride), which exhibits 29.8% of the AGC value. This compound has the lowest AGC (0.02 ug/m^3) of the compounds of concern; an order of magnitude lower than the nearest other AGC.

The other two models have been prepared, at the request of the NYSDEC, for comparison with the "Actual Conditions" model. The model produced using the project-long, high influent concentrations for each contaminant ("Project Maximum") exhibits a summary total of 210% for the AGCs and less than 1% for the SGCs. The third model, prepared with influent highs measured since January 28, 1998 reflects summary totals of 70.9% for AGCs and less than 1% for SGCs. The date January 28, 1998 was chosen based on the approximate end of the initial spike in concentrations of all contaminants associated with the start up of the pumping wells. This third model is considered by the Miller Brewing Company to be a

realistic representation of the potential high influent concentrations going forward with the groundwater treatment.

Proposed Work Plan

Based on the loading data discussed above, and the associated estimated ambient air impacts, the Miller Brewing Company plans to install a 10-foot addition to the effluent stack and discontinue the use of Vapor Phase Carbon treatment at the on-site GWTF as soon as final approval is received and the work can be arranged. Following the stack up-grade, all vapor phase effluent from the air stripper will be routed around the two carbon units and directed to the stack. The vapor phase carbon units will be left in place at the facility in the event that carbon treatment should need to be reinstated.

It was suggested in the meeting on May 31, 2001 that following any up-grade of the effluent stack and subsequent discontinuance of vapor phase carbon treatment, air samples should be taken on a monthly basis for some trial period. This monitoring would be in an effort to ensure that the stack effluent maintains compliance with Air Guide – 1. However, the compound of most concern, 1,1-dichloroethene (vinylidene chloride) has an extremely low AGC (0.02 ug/m^3 or 0.005 ppbv). This very low concentration is well below the detection limit of any common air grab sample analytical method (e.g., TO-14), which typically report down to the 1 ppbv range. Consequently, it is proposed that the performance of the system and its ability to maintain Air Guide – 1 AGC levels will be tracked by monthly modeling of the system influent data. The GWTF influent flow rate and effluent stack flow rate will be measured each month and this data will be used to prepare updated ambient air impact models such as the ones presented in this letter. These models will be provided to the NYSDEC monthly in a letter report. In the event that the model indicates and exceedance of the Air Guide – 1 AGCs or SGCs, the air stripper effluent shall be immediately re-routed through the carbon units. Carbon treatment shall continue until ambient air quality models calculated from the monthly GWTF influent data indicate effluent levels below the Air Guide – 1 criteria for a period of 6 consecutive months. At that time, with prior approval from the NYSDEC, carbon treatment will again be discontinued

If you have any questions or comments regarding this work plan for the extension of former Miller Brewing Company Fulton New York GWTF effluent stack and discontinuance of vapor phase carbon treatment, please feel free to contact me at (518) 435-7260. Otherwise we look forward to you approval to this work plan.

Sincerely,

Charles K. Bartlett, P.E.
Environmental Services Department Manager
Earth Tech, Inc.
Albany, New York

attachments: Actual Conditions Model
Maximum Conditions Since February 1997 Model
Maximum Conditions Since January 1998 Model
Table 1 – Summary of Influent Characteristics
Syracuse Area Wind Rose
Summary of GWTF Influent Data February 1997 to Present

CC: Kathy Kinton, Miller Brewing Co., Milwaukee, WI
Henriette Hamell, NYSDOH, Syracuse, NY
John Florek, City of Fulton, Fulton, NY
Roger Parsons, City of Fulton , Fulton, NY
Michael Kelly, Earth Tech, Glens Falls, NY
Brett Mongillo, Earth Tech, Albany, NY
Gary Mullen, Earth Tech, Fulton, NY
G. David Foster, NYSDEC, Albany, NY
John Strang, NYSDEC, Albany, NY
John Mays, NYSDEC, Syracuse, NY
Rich White, Earth Tech, Cazenovia, NY
Daniel Barthold, Miller, Milwaukee, WI

TABLE 1
MILLER BREWING COMPANY
SUMMARY OF INFLUENT CHARACTERISTICS
AVERAGE FLOW RATE - 34.42 gpm
YEAR 4 - 1 MAY 2000 THROUGH 1 MAY 2001

PARAMETER	ACTUAL INFLUENT CON. (ug/l) 25-Apr-01	ACTUAL INFLUENT LOADINGS (lbs/hour)	ACTUAL INFLUENT LOADINGS (lbs/year)
1,1-Dichloroethylene	25	0.000431	3.7720
1,1-Dichloroethane	15	0.000258	2.2632
1,1,1-Trichloroethane	88	0.001516	13.2775
Trichloroethylene	0.0	0.000000	0.0000
cis-1,2-Dichloroethylene	67	0.001154	10.1090
Tetrachloroethylene	110	0.001895	16.5968

PARAMETER	TRUE MAXIMUM CON. (ug/l) SINCE FEB. 1997	TRUE MAXIMUM LOADINGS (lbs/hour)	TRUE MAXIMUM LOADINGS (lbs/year)
1,1-Dichloroethylene	170	0.002928	25.6496
1,1-Dichloroethane	21	0.000362	3.1685
1,1,1-Trichloroethane	580	0.009990	87.5105
Trichloroethylene	7.5	0.000129	1.1316
cis-1,2-Dichloroethylene	86	0.001481	12.9757
Tetrachloroethylene	270	0.004650	40.7377

PARAMETER	MAXIMUM CON. (ug/l) SINCE JAN. 1998	MAXIMUM LOADINGS (lbs/hour)	MAXIMUM LOADINGS (lbs/year)
1,1-Dichloroethylene	55	0.000947	8.2984
1,1-Dichloroethane	21	0.000362	3.1685
1,1,1-Trichloroethane	260	0.004478	39.2289
Trichloroethylene	7.5	0.000129	1.1316
cis-1,2-Dichloroethylene	86	0.001481	12.9757
Tetrachloroethylene	200	0.003445	30.1760

EMISSION POINT AND CONTAMINANT IMPACT SUMMARY OF AIR GUIDE 1 ANALYSIS

						SHORT-TERM IMPACT	CAVITY IMPACT	POINT or AREA SOURCE IMPACT	
LOC	FAC	E.P.	CAS NUMBER	EMISSIONS #/HOUR	EMISSIONS #/YEAR	ANNUAL EMISSIONS #/HOUR	MAXIMUM (Cav,Pt,Area) ug/m3	ACTUAL ANNUAL ug/m3	POTENTIAL ANNUAL ug/m3	ACTUAL ANNUAL ug/m3
			00075-35-4	0.000431	3.7720	0.000431	0.337403	0.000000	0.005967	0.005968
			00075-34-3	0.000258	2.2632	0.000258	0.202207	0.000000	0.003576	0.003581
			00071-55-6	0.001517	13.2775	0.001516	1.187329	0.000000	0.020997	0.021007
			00156-59-2	0.001154	10.1090	0.001154	0.903551	0.000000	0.015979	0.015994
			00127-18-4	0.001896	16.5968	0.001895	1.484103	0.000000	0.026245	0.026259
SUMMARY TOTALS				0.005256	46.0185	0.005253	4.114593	0.000000	0.072763	0.072808

EMISSION POINT AND CONTAMINANT ASSESSMENT OF AIR GUIDE 1 ANALYSIS

						SHORT-TERM IMPACT	CAVITY IMPACT	POINT or AREA SOURCE IMPACT	
LOC	FAC	E.P.	CAS NUMBER	AGC ug/m3	SGC ug/m3	MAXIMUM (Cav,Pt,Area) % OF SGC	ACTUAL ANNUAL % OF AGC	POTENTIAL ANNUAL % OF AGC	ACTUAL ANNUAL % OF AGC
			00075-35-4	0.020000000	0.0000	0.0000	0.0000	29.8335	29.8394
			00075-34-3	20.000000000	0.0000	0.0000	0.0000	0.0179	0.0179
			00071-55-6	1000.000000000	68000.0000	0.0017	0.0000	0.0021	0.0021
			00156-59-2	1900.000000000	0.0000	0.0000	0.0000	0.0008	0.0008
			00127-18-4	1.000000000	1000.0000	0.1484	0.0000	2.6245	2.6259
SUMMARY TOTALS						0.1502	0.0000	32.4788	32.4861

CONTAMINANT IMPACT SUMMARY OF AIR GUIDE 1 ANALYSIS

CAS NUMBER	EMISSIONS #/HOUR	EMISSIONS #/YEAR	ANNUAL EMISSIONS #/HOUR	SUMMATION OF SHORT-TERM IMPACTS, MAXIMUM (Cav,Pt,Area) ug/m3	SUMMATION OF CAVITY IMPACTS ACTUAL ANNUAL ug/m3	SUMMATION OF POINT or AREA SOURCE IMPACTS POTENTIAL ANNUAL ug/m3	SUMMATION OF POINT or AREA SOURCE IMPACTS ACTUAL ANNUAL ug/m3
00071-55-6	0.001517	13.2775	0.001516	1.187329	0.000000	0.020997	0.021007
00075-34-3	0.000258	2.2632	0.000258	0.202207	0.000000	0.003576	0.003581
00075-35-4	0.000431	3.7720	0.000431	0.337403	0.000000	0.005967	0.005968
00127-18-4	0.001896	16.5968	0.001895	1.484103	0.000000	0.026245	0.026259
00156-59-2	0.001154	10.1090	0.001154	0.903551	0.000000	0.015979	0.015994
SUMMARY TOTALS	0.005256	46.0185	0.005253	4.114592	0.000000	0.072763	0.072808

CONTAMINANT ASSESSMENT SUMMARY OF AIR GUIDE 1 ANALYSIS

CAS NUMBER	AGC ug/m3	SGC ug/m3	SUMMATION OF SHORT-TERM IMPACTS, MAXIMUM (Cav,Pt,Area) % OF SGC	SUMMATION OF CAVITY IMPACTS ACTUAL ANNUAL % OF AGC	SUMMATION OF POINT or AREA SOURCE IMPACTS POTENTIAL ANNUAL % OF AGC	SUMMATION OF POINT or AREA SOURCE IMPACTS ACTUAL ANNUAL % OF AGC
00071-55-6	1000.000000000	68000.0000	0.0017	0.0000	0.0021	0.0021
00075-34-3	20.000000000	0.0000	0.0000	0.0000	0.0179	0.0179
00075-35-4	0.020000000	0.0000	0.0000	0.0000	29.8335	29.8394
00127-18-4	1.000000000	1000.0000	0.1484	0.0000	2.6245	2.6259
00156-59-2	1900.000000000	0.0000	0.0000	0.0000	0.0008	0.0008
SUMMARY TOTALS			0.1502	0.0000	32.4788	32.4861

********** AIR GUIDE 1 - ANALYSIS **********

********** INPUT DATA **********

LOC	FAC	E.P.	CAS #	SOURCE TYPE	HA, or h(AREA) FEET	hs FEET	D IN.	T F	V FPS	Q ACFM	EMISSIONS #/HOUR	EMISSIONS #/YEAR	DPL, or D(AREA) FT	BW, or S(AREA) FT	BL FT
Facility Name & Address:													Fulton NY		Fulton NY
SIC Code: 0	Application:				UTME: 387000.			UTMN: 470500.			BL FACING DIRECTION: 180.0		%CONTROL: 0.0000		
	00079-01-6	POINT	12.	30.	20.	70.	9.40	1089.00	0.00013	1.	65.	40.	80.		
Facility Name & Address:													Fulton NY		Fulton NY
SIC Code: 0	Application:				UTME: 387000.			UTMN: 470500.			BL FACING DIRECTION: 180.0		%CONTROL: 0.0000		
	00075-35-4	POINT	12.	30.	20.	70.	9.40	1089.00	0.00293	26.	65.	40.	80.		
Facility Name & Address:													Fulton NY		Fulton NY
SIC Code: 0	Application:				UTME: 387000.			UTMN: 470500.			BL FACING DIRECTION: 180.0		%CONTROL: 0.0000		
	00075-34-3	POINT	12.	30.	20.	70.	9.40	1089.00	0.00036	3.	65.	40.	80.		
Facility Name & Address:													Fulton NY		Fulton NY
SIC Code: 0	Application:				UTME: 387000.			UTMN: 470500.			BL FACING DIRECTION: 180.0		%CONTROL: 0.0000		
	00071-55-6	POINT	12.	30.	20.	70.	9.40	1089.00	0.00999	88.	65.	40.	80.		
Facility Name & Address:													Fulton NY		Fulton NY
SIC Code: 0	Application:				UTME: 387000.			UTMN: 470500.			BL FACING DIRECTION: 180.0		%CONTROL: 0.0000		
	00156-59-2	POINT	12.	30.	20.	70.	9.40	1089.00	0.00148	13.	65.	40.	80.		
Facility Name & Address:													Fulton NY		Fulton NY
SIC Code: 0	Application:				UTME: 387000.			UTMN: 470500.			BL FACING DIRECTION: 180.0		%CONTROL: 0.0000		
	00127-18-4	POINT	12.	30.	20.	70.	9.40	1089.00	0.00465	41.	65.	40.	80.		

CONTAMINANT TOXICITY PROFILE FOR AIR GUIDE 1 ANALYSIS

CONTAMINANT NAME	CAS NUMBER	SGC ug/m3	HOW SGC ASSIGNED	AGC ug/m3	HOW AGC ASSIGNED	DAR TOXICITY	COMMENTS
METHYL CHLOROFORM	00071-55-6	68000.00000	NYSDEC	1000.000000000	NYSDEC	LOW	H,I
DICHLOROETHANE,1,1	00075-34-3	0.00000	NO SGC EXISTS	20.000000000	NYSDEC	LOW	H,I
VINYLIDENE CHLORIDE	00075-35-4	0.00000	NO SGC EXISTS	0.020000000	EPA	HIGH	H,U
TRICHLOROETHYLENE	00079-01-6	54000.00000	TETRACHLOROETHYLENE	0.450000000	NYSDEC	MODERATE	H,I,U
TETRACHLOROETHYLENE	00127-18-4	1000.00000	NYSDOH	1.000000000	NYSDOH	MODERATE	H,I,U
cis-DICHLOROETHYLENE	00156-59-2	0.00000	NO SGC EXISTS	1900.000000000	NYSDEC "ANALOGY"	MODERATE	

COMMENTS :

(H) HAP identified by 1990 CAAA.

(I) Refer to ACGIH Handbook.

(U) AGC equivalent to "one in a million risk".

EMISSION POINT AND CONTAMINANT IMPACT SUMMARY OF AIR GUIDE 1 ANALYSIS

						SHORT-TERM IMPACT	CAVITY IMPACT	POINT or AREA SOURCE IMPACT	
LOC	FAC	E.P.	CAS NUMBER	EMISSIONS #/HOUR	EMISSIONS #/YEAR	ANNUAL EMISSIONS #/HOUR	MAXIMUM (Cav,Pt,Area) ug/m3	ACTUAL ANNUAL ug/m3	POTENTIAL ANNUAL ug/m3	ACTUAL ANNUAL ug/m3
			00079-01-6	0.000129	1.1316	0.000129	0.100986	0.000000	0.001786	0.001790
			00075-35-4	0.002928	25.6496	0.002928	2.292147	0.000000	0.040535	0.040582
			00075-34-3	0.000362	3.1685	0.000362	0.283387	0.000000	0.005011	0.005013
			00071-55-6	0.009990	87.5105	0.009990	7.820544	0.000000	0.138300	0.138455
			00156-59-2	0.001481	12.9757	0.001481	1.159382	0.000000	0.020503	0.020530
			00127-18-4	0.004650	40.7377	0.004650	3.640193	0.000000	0.064374	0.064453
SUMMARY TOTALS				0.019540	171.1736	0.019540	15.296639	0.000000	0.270509	0.270823

EMISSION POINT AND CONTAMINANT ASSESSMENT OF AIR GUIDE 1 ANALYSIS

						SHORT-TERM IMPACT	CAVITY IMPACT	POINT or AREA SOURCE IMPACT	
LOC	FAC	E.P.	CAS NUMBER	AGC ug/m3	SGC ug/m3	MAXIMUM (Cav,Pt,Area) % OF SGC	ACTUAL ANNUAL % OF AGC	POTENTIAL ANNUAL % OF AGC	ACTUAL ANNUAL % OF AGC
			00079-01-6	0.450000000	54000.0000	0.0002	0.0000	0.3969	0.3979
			00075-35-4	0.020000000	0.0000	0.0000	0.0000	202.6738	202.9080
			00075-34-3	20.000000000	0.0000	0.0000	0.0000	0.0251	0.0251
			00071-55-6	1000.000000000	68000.0000	0.0115	0.0000	0.0138	0.0138
			00156-59-2	1900.000000000	0.0000	0.0000	0.0000	0.0011	0.0011
			00127-18-4	1.000000000	1000.0000	0.3640	0.0000	6.4374	6.4453
SUMMARY TOTALS						0.3757	0.0000	209.5480	209.7911

CONTAMINANT IMPACT SUMMARY OF AIR GUIDE 1 ANALYSIS

CAS NUMBER	EMISSIONS #/HOUR	EMISSIONS #/YEAR	ANNUAL EMISSIONS #/HOUR	SUMMATION OF SHORT-TERM IMPACTS, MAXIMUM (Cav,Pt,Area) ug/m3	SUMMATION OF CAVITY IMPACTS ACTUAL ANNUAL ug/m3	SUMMATION OF POINT or AREA SOURCE IMPACTS POTENTIAL ANNUAL ug/m3	SUMMATION OF POINT or AREA SOURCE IMPACTS ACTUAL ANNUAL ug/m3
00071-55-6	0.009990	87.5105	0.009990	7.820544	0.000000	0.138300	0.138455
00075-34-3	0.000362	3.1685	0.000362	0.283387	0.000000	0.005011	0.005013
00075-35-4	0.002928	25.6496	0.002928	2.292147	0.000000	0.040535	0.040582
00079-01-6	0.000129	1.1316	0.000129	0.100986	0.000000	0.001786	0.001790
00127-18-4	0.004650	40.7377	0.004650	3.640193	0.000000	0.064374	0.064453
00156-59-2	0.001481	12.9757	0.001481	1.159382	0.000000	0.020503	0.020530
SUMMARY TOTALS	0.019540	171.1736	0.019540	15.296638	0.000000	0.270509	0.270823

CONTAMINANT ASSESSMENT SUMMARY OF AIR GUIDE 1 ANALYSIS

CAS NUMBER	AGC ug/m3	SGC ug/m3	SUMMATION OF SHORT-TERM IMPACTS, MAXIMUM (Cav,Pt,Area) % OF SGC	SUMMATION OF CAVITY IMPACTS ACTUAL ANNUAL % OF AGC	SUMMATION OF POINT or AREA SOURCE IMPACTS POTENTIAL ANNUAL % OF AGC	SUMMATION OF POINT or AREA SOURCE IMPACTS ACTUAL ANNUAL % OF AGC
00071-55-6	1000.000000000	68000.0000	0.0115	0.0000	0.0138	0.0138
00075-34-3	20.000000000	0.0000	0.0000	0.0000	0.0251	0.0251
00075-35-4	0.020000000	0.0000	0.0000	0.0000	202.6738	202.9080
00079-01-6	0.450000000	54000.0000	0.0002	0.0000	0.3969	0.3979
00127-18-4	1.000000000	1000.0000	0.3640	0.0000	6.4374	6.4453
00156-59-2	1900.000000000	0.0000	0.0000	0.0000	0.0011	0.0011
SUMMARY TOTALS			0.3757	0.0000	209.5480	209.7911

********** AIR GUIDE 1 - ANALYSIS **********

********** INPUT DATA **********

LOC	FAC	E.P.	CAS #	SOURCE TYPE	HA, or h(AREA) FEET	hs FEET	D IN.	T F	V FPS	Q ACFM	EMISSIONS #/HOUR	EMISSIONS #/YEAR	DPL, or D(AREA) FT	SW, or S(AREA) FT	BL FT
Facility Name & Address:													Fulton NY		Fulton NY
SIC Code:	0	Application:		UTME:	387000.		UTMN:	470500.		BL FACING DIRECTION:	180.0		%CONTROL:	0.0000	
		00079-01-6	POINT	12.	30.	20.	70.	9.40	1089.00	0.00013	1.		65.	40.	80.
Facility Name & Address:													Fulton NY		Fulton NY
SIC Code:	0	Application:		UTME:	387000.		UTMN:	470500.		BL FACING DIRECTION:	180.0		%CONTROL:	0.0000	
		00075-35-4	POINT	12.	30.	20.	70.	9.40	1089.00	0.00095	8.		65.	40.	80.
Facility Name & Address:													Fulton NY		Fulton NY
SIC Code:	0	Application:		UTME:	387000.		UTMN:	470500.		BL FACING DIRECTION:	180.0		%CONTROL:	0.0000	
		00075-34-3	POINT	12.	30.	20.	70.	9.40	1089.00	0.00036	3.		65.	40.	80.
Facility Name & Address:													Fulton NY		Fulton NY
SIC Code:	0	Application:		UTME:	387000.		UTMN:	470500.		BL FACING DIRECTION:	180.0		%CONTROL:	0.0000	
		00071-55-6	POINT	12.	30.	20.	70.	9.40	1089.00	0.00448	39.		65.	40.	80.
Facility Name & Address:													Fulton NY		Fulton NY
SIC Code:	0	Application:		UTME:	387000.		UTMN:	470500.		BL FACING DIRECTION:	180.0		%CONTROL:	0.0000	
		00156-59-2	POINT	12.	30.	20.	70.	9.40	1089.00	0.00148	13.		65.	40.	80.
Facility Name & Address:													Fulton NY		Fulton NY
SIC Code:	0	Application:		UTME:	387000.		UTMN:	470500.		BL FACING DIRECTION:	180.0		%CONTROL:	0.0000	
		00127-18-4	POINT	12.	30.	20.	70.	9.40	1089.00	0.00345	30.		65.	40.	80.

CONTAMINANT TOXICITY PROFILE FOR AIR GUIDE 1 ANALYSIS

CONTAMINANT NAME	CAS NUMBER	SGC ug/m3	HOW SGC ASSIGNED	AGC ug/m3	HOW AGC ASSIGNED	DAR TOXICITY	COMMENTS
METHYL CHLOROFORM	00071-55-6	68000.00000	NYSDEC	1000.000000000	NYSDEC	LOW	H,I
DICHLOROETHANE,1,1	00075-34-3	0.00000	NO SGC EXISTS	20.000000000	NYSDEC	LOW	H,I
VINYLIDENE CHLORIDE	00075-35-4	0.00000	NO SGC EXISTS	0.020000000	EPA	HIGH	H,U
TRICHLOROETHYLENE	00079-01-6	54000.00000	TETRACHLOROETHYLENE	0.450000000	NYSDEC	MODERATE	H,I,U
TETRACHLOROETHYLENE	00127-18-4	1000.00000	NYSDOH	1.000000000	NYSDOH	MODERATE	H,I,U
cis-DICHLOROETHYLENE	00156-59-2	0.00000	NO SGC EXISTS	1900.000000000	NYSDEC "ANALOGY"	MODERATE	

COMMENTS :

(H) HAP identified by 1990 CAAA.

(I) Refer to ACGIH Handbook.

(U) AGC equivalent to "one in a million risk".

EMISSION POINT AND CONTAMINANT IMPACT SUMMARY OF AIR GUIDE 1 ANALYSIS

LOC	FAC	E.P.	CAS NUMBER	EMISSIONS #/HOUR	EMISSIONS #/YEAR	ANNUAL EMISSIONS #/HOUR	SHORT-TERM IMPACT MAXIMUM (Cav,Pt,Area) ug/m3	CAVITY IMPACT ACTUAL ANNUAL ug/m3	POINT or AREA SOURCE IMPACT POTENTIAL ANNUAL ug/m3	POINT or AREA SOURCE IMPACT ACTUAL ANNUAL ug/m3
			00079-01-6	0.000129	1.1316	0.000129	0.100986	0.000000	0.001786	0.001790
			00075-35-4	0.000947	8.2984	0.000947	0.741347	0.000000	0.013110	0.013129
			00075-34-3	0.000362	3.1685	0.000362	0.283387	0.000000	0.005011	0.005013
			00071-55-6	0.004478	39.2289	0.004478	3.505545	0.000000	0.061993	0.062066
			00156-59-2	0.001481	12.9757	0.001481	1.159382	0.000000	0.020503	0.020530
			00127-18-4	0.003445	30.1760	0.003445	2.696874	0.000000	0.047692	0.047743
SUMMARY TOTALS				0.010842	94.9791	0.010842	8.487520	0.000000	0.150095	0.150271

EMISSION POINT AND CONTAMINANT ASSESSMENT OF AIR GUIDE 1 ANALYSIS

LOC	FAC	E.P.	CAS NUMBER	AGC ug/m3	SGC ug/m3	SHORT-TERM IMPACT MAXIMUM (Cav,Pt,Area) % OF SGC	CAVITY IMPACT ACTUAL ANNUAL % OF AGC	POINT or AREA SOURCE IMPACT POTENTIAL ANNUAL % OF AGC	POINT or AREA SOURCE IMPACT ACTUAL ANNUAL % OF AGC
			00079-01-6	0.450000000	54000.0000	0.0002	0.0000	0.3969	0.3979
			00075-35-4	0.020000000	0.0000	0.0000	0.0000	65.5506	65.6467
			00075-34-3	20.000000000	0.0000	0.0000	0.0000	0.0251	0.0251
			00071-55-6	1000.000000000	68000.0000	0.0052	0.0000	0.0062	0.0062
			00156-59-2	1900.000000000	0.0000	0.0000	0.0000	0.0011	0.0011
			00127-18-4	1.000000000	1000.0000	0.2697	0.0000	4.7692	4.7743
SUMMARY TOTALS						0.2750	0.0000	70.7490	70.8512

CONTAMINANT IMPACT SUMMARY OF AIR GUIDE 1 ANALYSIS

CAS NUMBER	EMISSIONS #/HOUR	EMISSIONS #/YEAR	ANNUAL EMISSIONS #/HOUR	SUMMATION OF SHORT-TERM IMPACTS, MAXIMUM (Cav,Pt,Area) ug/m3	SUMMATION OF CAVITY IMPACTS ACTUAL ANNUAL ug/m3	SUMMATION OF POINT or AREA SOURCE IMPACTS POTENTIAL ANNUAL ug/m3	SUMMATION OF POINT or AREA SOURCE IMPACTS ACTUAL ANNUAL ug/m3
00071-55-6	0.004478	39.2289	0.004478	3.505545	0.000000	0.061993	0.062066
00075-34-3	0.000362	3.1685	0.000362	0.283387	0.000000	0.005011	0.005013
00075-35-4	0.000947	8.2984	0.000947	0.741347	0.000000	0.013110	0.013129
00079-01-6	0.000129	1.1316	0.000129	0.100986	0.000000	0.001786	0.001790
00127-18-4	0.003445	30.1760	0.003445	2.696874	0.000000	0.047692	0.047743
00156-59-2	0.001481	12.9757	0.001481	1.159382	0.000000	0.020503	0.020530
SUMMARY TOTALS	0.010842	94.9791	0.010842	8.487520	0.000000	0.150095	0.150271

CONTAMINANT ASSESSMENT SUMMARY OF AIR GUIDE 1 ANALYSIS

CAS NUMBER	AGC ug/m3	SGC ug/m3	SUMMATION OF SHORT-TERM IMPACTS, MAXIMUM (Cav,Pt,Area) % OF SGC	SUMMATION OF CAVITY IMPACTS ACTUAL ANNUAL % OF AGC	SUMMATION OF POINT or AREA SOURCE IMPACTS POTENTIAL ANNUAL % OF AGC	SUMMATION OF POINT or AREA SOURCE IMPACTS ACTUAL ANNUAL % OF AGC
00071-55-6	1000.000000000	68000.0000	0.0052	0.0000	0.0062	0.0062
00075-34-3	20.000000000	0.0000	0.0000	0.0000	0.0251	0.0251
00075-35-4	0.020000000	0.0000	0.0000	0.0000	65.5506	65.6467
00079-01-6	0.450000000	54000.0000	0.0002	0.0000	0.3969	0.3979
00127-18-4	1.000000000	1000.0000	0.2697	0.0000	4.7692	4.7743
00156-59-2	1900.000000000	0.0000	0.0000	0.0000	0.0011	0.0011
SUMMARY TOTALS			0.2750	0.0000	70.7490	70.8512

GROUNDWATER SAMPLING RESULTS-FORMER MILLER BREWING FACILITY
AIR STRIPPER INFLUENT SAMPLING DATA

AST INFLUENT DATA - USEPA Method 624 + Xylenes, Keytones; Oil & Grease DATE: February 17, 1997 - April 22, 1998

DATE	Oil & Grease	Benzene	Chloroform	1,1-DCA	1,1-DCE	c-1,2-DCE	Ethyl-benzene	Methylene Chloride	PCE	Toluene	1,1,1-TCA	TCE	Vinyl Chloride	Acetone	MEK	MIBK	Total Xylenes
25-Oct-99	6.30	<5.0	<5.0	12.00	18.00	55.00	<5.0	<10.0	85.00	<5.0	62.00	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0
22-Nov-99	<5.0	<5.0	<5.0	13.00	21.00	59.00	<5.0	<10.0	75.00	<5.0	75.00	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0
20-Dec-99	<5.0	<5.0	<5.0	12.00	16.00	57.00	<5.0	<10.0	80.00	<5.0	54.00	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0
18-Jan-00	<5.0	<5.0	<5.0	11.00	15.00	49.00	<5.0	<10.0	67.00	<5.0	48.00	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0
22-Feb-00	<5.0	<5.0	<5.0	18.00	13.00	77.00	<5.0	<10.0	44.00	<5.0	40.00	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0
28-Mar-00	6.40	<5.0	<5.0	12.00	16.00	54.00	<5.0	<10.0	67.00	<5.0	54.00	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0
26-Apr-00	<5.0	<5.0	<5.0	14.00	14.00	66.00	<5.0	<10.0	38.00	<5.0	44.00	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0
24-May-00	<5.0	<5.0	<5.0	16.00	19.00	78.00	<5.0	<10.0	43.00	<5.0	57.00	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0
22-Jun-00	<5.0	<5.0	<5.0	17.00	27.00	86.00	<5.0	<10.0	50.00	<5.0	74.00	5.70	<5.0	<10.0	<10.0	<10.0	<5.0
25-Jul-00	<5.0	<5.0	<5.0	16.00	33.00	78.00	<5.0	<10.0	60.00	<5.0	110.00	5.90	<5.0	<10.0	<10.0	<10.0	<5.0
30-Aug-00	<5.0	<5.0	<5.0	17.00	34.00	81.00	<5.0	<10.0	80.00	<5.0	140.00	5.50	<5.0	<10.0	<10.0	<10.0	<5.0
20-Sep-00	<5.0	<5.0	<5.0	19.00	39.00	81.00	<5.0	<10.0	96.00	<5.0	170.00	5.80	<5.0	<10.0	<10.0	<10.0	<5.0
24-Oct-00	5.00	<5.0	<5.0	18.00	41.00	74.00	<5.0	<10.0	110.00	<5.0	190.00	5.40	<5.0	<10.0	<10.0	<10.0	<5.0
21-Nov-00	<5.0	<5.0	<5.0	19.00	46.00	80.00	<5.0	<10.0	130.00	<5.0	190.00	6.00	<5.0	<10.0	<10.0	<10.0	<5.0
13-Dec-00	<5.0	<5.0	<5.0	18.00	35.00	70.00	<5.0	<10.0	97.00	<5.0	130.00	6.10	<5.0	<10.0	<10.0	<10.0	<5.0
23-Jan-01	<5.0	<5.0	<5.0	21.00	41.00	85.00	<5.0	<10.0	150.00	<5.0	150.00	5.60	<5.0	<10.0	<10.0	<10.0	<5.0
20-Feb-01	<5.0	<5.0	<5.0	16.00	30.00	66.00	<5.0	<10.0	120.00	<5.0	110.00	5.60	<5.0	<10.0	<10.0	<10.0	<5.0
20-Mar-01	<5.0	<5.0	<5.0	15.00	28.00	64.00	<5.0	<10.0	130.00	<5.0	110.00	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0
20-Apr-01	<5.0	<5.0	<5.0	15.00	25.00	67.00	<5.0	<10.0	110.00	<5.0	88.00	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0
20-May-01	<5.0	<5.0	<5.0				<5.0	<10.0		<5.0		<5.0	<5.0	<10.0	<10.0	<10.0	<5.0
20-Jun-01	<5.0	<5.0	<5.0				<5.0	<10.0		<5.0		<5.0	<5.0	<10.0	<10.0	<10.0	<5.0
20-Jul-01	<5.0	<5.0	<5.0				<5.0	<10.0		<5.0		<5.0	<5.0	<10.0	<10.0	<10.0	<5.0
20-Aug-01	<5.0	<5.0	<5.0				<5.0	<10.0		<5.0		<5.0	<5.0	<10.0	<10.0	<10.0	<5.0
20-Sep-01	<5.0	<5.0	<5.0				<5.0	<10.0		<5.0		<5.0	<5.0	<10.0	<10.0	<10.0	<5.0
20-Oct-01	<5.0	<5.0	<5.0				<5.0	<10.0		<5.0		<5.0	<5.0	<10.0	<10.0	<10.0	<5.0
20-Nov-01	<5.0	<5.0	<5.0				<5.0	<10.0		<5.0		<5.0	<5.0	<10.0	<10.0	<10.0	<5.0

NOTES: All data given in µg/l unless otherwise specified. Oil & grease data presented in mg/l.

PCE - Tetrachloroethene

* = estimated value

**June 26, 1997 data showed 19 ug/l 1,2- DCA and non-detect on 1,1-DCA these were possibly switched by the lab in error.

GROUNDWATER SAMPLING RESULTS-FORMER MILLER BREWING FACILITY
AIR STRIPPER INFLUENT SAMPLING DATA

AST INFLUENT DATA - USEPA Method 624 + Xylenes, Keytones; Oil & Grease DATE: February 17, 1997 - April 22, 1998

DATE	Oil & Grease	Benzene	Chloroform	1,1-DCA	1,1-DCE	c-1,2-DCE	Ethyl-benzene	Methylene Chloride	PCE	Toluene	1,1,1-TCA	TCE	Vinyl Chloride	Acetone	MEK	MIBK	Total Xylenes
26-Feb-97	<4.0	<10.0	<10.0	18.00	54.00	48.00	<10.0	<10.0	100.00	<10.0	300.00	<10.0	<20.0	<20.0	<20.0	<20.0	<10.0
19-Mar-97	<4.0	<10.0	<10.0	16.00	34.00	42.00	<10.0	<10.0	51.00	<10.0	160.00	<10.0	<20.0	<20.0	<20.0	<20.0	<10.0
24-Apr-97	4.60	<5.0	<5.0	11.00	26.00	26.00	<5.0	<5.0	60.00	<5.0	120.00	<5.0	<10.0	<10.0	<10.0	<10.0	<5.0
28-May-97	<4.0	<5.0	<5.0	16.00	43.00	54.00	<5.0	<5.0	72.00	<5.0	190.00	<5.0	<10.0	<10.0	<10.0	<10.0	<5.0
26-Jun-97	<4.0	<10.0	<10.0	18.00	110.00	53.00	<10.0	<10.0	180.00	<10.0	450.00	<10.0	<20.0	<20.0	<20.0	<20.0	<10.0
25-Jul-97	<4.0	<20.0	<20.0	20.00	170.00	51.00	<20.0	<20.0	260.00	<20.0	580.00	<20.0	<40.0	<40.0	<40.0	<40.0	<20.0
27-Aug-97	<4.0	<10.0	<10.0	20.00	120.00	66.00	<10.0	<10.0	270.00	<10.0	410.00	<10.0	<20.0	<20.0	<20.0	<20.0	<10.0
24-Sep-97	5.20	<20.0	<20.0	18.00	87.00	79.00	<20.0	<20.0	270.00	<20.0	420.00	<20.0	<40.0	<40.0	<40.0	<40.0	<20.0
22-Oct-97	<4.0	<20.0	<20.0	17.00	70.00	71.00	<20.0	<20.0	150.00	<20.0	360.00	<20.0	<40.0	<40.0	<40.0	<40.0	<20.0
25-Nov-97	6.90	<10.0	<10.0	14.00	75.00	64.00	<10.0	<10.0	180.00	<10.0	330.00	<10.0	<20.0	<20.0	<20.0	<20.0	<10.0
17-Dec-97	<4.0	<20.0	<20.0	14.00	56.00	63.00	<20.0	<20.0	210.00	<20.0	300.00	<20.0	<40.0	<40.0	<40.0	<40.0	<20.0
28-Jan-98	<5.0	<5.0	<5.0	14.00	52.00	65.00	<5.0	<5.0	200.00	<5.0	260.00	7.50	<10.0	<10.0	<10.0	<10.0	<5.0
25-Feb-98	<4.0	<5.0	<5.0	12.00	44.00	51.00	<5.0	<5.0	190.00	<5.0	220.00	6.80	<10.0	<10.0	<10.0	<10.0	<5.0
26-Mar-98	<6.0	<5.0	<5.0	8.10	30.00	41.00	<5.0	<5.0	200.00	<5.0	180.00	6.00	<10.0	<10.0	<10.0	<10.0	<5.0
23-Apr-98	<5.0	<5.0	<5.0	14.00	48.00	76.00	<5.0	*9.50	180.00	<5.0	200.00	6.50	<10.0	<10.0	<10.0	<10.0	<5.0
27-May-98	<5.0	<5.0	<5.0	16.00	48.00	78.00	<5.0	<5.0	180.00	<5.0	220.00	7.00	<10.0	<10.0	<10.0	<10.0	<5.0
26-Jun-98	<4.0	<5.0	<5.0	15.00	52.00	84.00	<5.0	<5.0	170.00	<5.0	230.00	5.70	<10.0	<10.0	<10.0	<10.0	<5.0
22-Jul-98	<4.0	<5.0	<5.0	16.00	53.00	80.00	<5.0	<5.0	150.00	<5.0	220.00	5.70	<10.0	<10.0	<10.0	<10.0	<5.0
20-Aug-98	<4.0	<5.0	<5.0	15.00	55.00	77.00	<5.0	<5.0	170.00	<5.0	220.00	5.20	<10.0	<10.0	<10.0	<10.0	<5.0
24-Sep-98	<4.0	<5.0	<5.0	9.80	30.00	50.00	<5.0	<5.0	120.00	<5.0	120.00	<5.0	<10.0	<10.0	<10.0	<10.0	<5.0
22-Oct-98	<4.0	<20.0	<20.0	10.00	33.00	64.00	<20.0	<40.0	140.00	<20.0	140.00	<20.0	<20.0	<40.0	<40.0	<40.0	<20.0
23-Nov-98	<4.0	<5.0	<5.0	12.00	32.00	54.00	<5.0	<5.0	130.00	<5.0	120.00	<5.0	<10.0	<10.0	<10.0	<10.0	<5.0
15-Dec-98	<4.0	<5.0	<5.0	17.00	38.00	81.00	<5.0	<5.0	120.00	<5.0	140.00	5.20	<10.0	<10.0	<10.0	<10.0	<5.0
27-Jan-99	<4.0	<5.0	<5.0	9.80	24.00	44.00	<5.0	<5.0	100.00	<5.0	97.00	<5.0	<10.0	<10.0	<10.0	<10.0	<5.0
25-Feb-99	<4.0	<5.0	<5.0	9.90	21.00	47.00	<5.0	<5.0	100.00	<5.0	86.00	<5.0	<10.0	<10.0	<10.0	<10.0	<5.0
24-Mar-99	<4.0	<5.0	<5.0	11.00	21.00	47.00	<5.0	<5.0	96.00	<5.0	82.00	<5.0	<10.0	<10.0	<10.0	<10.0	<5.0
22-Apr-99	<4.0	<5.0	<5.0	14.00	28.00	58.00	<5.0	<10.0	100.00	<5.0	83.00	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0
27-May-99	<4.0	<5.0	<5.0	12.00	23.00	53.00	<5.0	<10.0	110.00	<5.0	79.00	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0
22-Jun-99	<4.0	<5.0	<5.0	11.00	22.00	58.00	<5.0	<10.0	100.00	<5.0	70.00	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0
21-Jul-99	<4.0	<5.0	<5.0	12.00	23.00	57.00	<5.0	<10.0	95.00	<5.0	74.00	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0
26-Aug-99	<4.0	<5.0	<5.0	14.00	28.00	69.00	<5.0	<10.0	120.00	<5.0	95.00	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0
28-Sep-99	<4.0	<5.0	<5.0	13.00	20.00	50.00	<5.0	<10.0	88.00	<5.0	70.00	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0