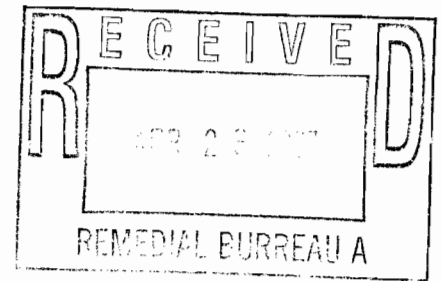




O'BRIEN & GERE



April 17, 2007

Mr. Jeffrey Dyber, P.E.
NYSDEC
Remedial Bureau A
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, NY 12233-701

Re: DAR-1 Analysis for the Former National
Heatset Printing Site

File: 10653/35518 #2

Dear Jeff:

At your request, O'Brien & Gere performed a DAR-1 modeling analysis for the soil vapor extraction (SVE) system air discharge stream at the former National Heatset Printing site in Farmingdale, New York. The purpose of the analysis was to identify if pre-control emissions (prior to the granular activated carbon (GAC) units) would result in ambient concentrations less than the DAR-1 guideline values for relevant contaminants. If the ambient concentrations do not exceed the guideline values, the GAC units may not be required for future treatment of the SVE system air discharge stream. As part of the evaluation, emission rates were also compared to the permit limits.

Modeling was performed using NYSDEC's DAR-1 software. Model inputs used in the analysis are summarized in Table 1.

In order to perform the modeling analysis, pre-control emission rates needed to be determined. To calculate the pre-control emission rates, an air sample was collected prior to the GAC units on March 12, 2007. The sample was submitted to Mitkem Corp for analyses using EPA Method TO-14. A copy of the lab results is included in Attachment A. TCE and cis-1,2-DCE were undetected in the sample; however, PCE and benzene were detected at 19,000 and 3,000 ug/m³, respectively.

A summary of calculated hourly and annual emission rates at the point of discharge (without GAC), based on the analytical data results, is presented in Table 2. Table 2 also includes a comparison of these emission rates to the permit limitations. All calculated emission rates are below the permit limits.

Predicted maximum ambient concentrations downwind of the stack, based on the modeling analysis, are presented in Table 3. A copy of the output from the DAR-1 software has been included as Attachment B. The predicted maximum off-site ambient concentrations for PCE, TCE, cis-1,2-DCE and benzene are below their respective DAR-1 guideline values.

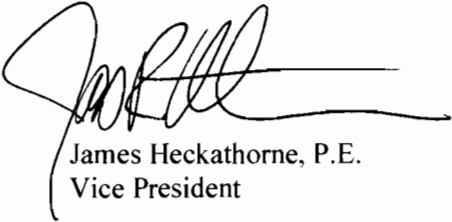
Mr. Jeff Dyber
April 17, 2007
Page 2

Since the predicted maximum ambient concentrations for PCE, TCE, cis-1,2-DCE and benzene are below their respective DAR-1 guideline values, and the calculated emission rates are below the permit limits, GAC is not required to treat the SVE system air discharge stream. The SVE system can continue to operate with the GAC in-place until the GAC is saturated. At that time the GAC can be removed and disposed at an approved facility. Please let us know how you would like us to proceed regarding the use of GAC on the SVE system.

If you have any questions on the above information, please call me at 315-437-6100.

Very truly yours,

O'BRIEN & GERE ENGINEERS



James Heckathorne, P.E.
Vice President



I:\DIV71\Projects\10653\35518\2_corres\DAR-1 Letter #2\Followup DAR-1 Analysis Letter Report.doc

cc: Marc Dent, P.E. – O'Brien & Gere
Katie Cooper - O'Brien & Gere

Table 1

*Former National Heatset Printing Site
Farmingdale, New York*

Summary of Model Inputs

Stack Height (ft)	Stack Height Above Building (ft)	Temp (F)	Flow (acfm)	Diameter (In)	Distance to Property Line (ft)	Building Width (ft)	Building Length (ft)
30	10	100	200 ^a	4.0	1 ^b	275	340

^aThe flow rate associated with this stack varies, 200 acfm represents a typical value.

^bThe distance to propertyline was conservatively assumed to be 1 foot.



Table 2

*Former National Heatset Printing Site
Farmingdale, New York*

Summary of Calculated Emission Rates and Permit Limits

Contaminant	CAS Number	Concentration ^a (ug/m ³)	Calculated Hourly Emission Rate ^{b,c} (lb/hr)	Hourly Permit Limit (lb/hr)	Calculated Annual Emission Rate ^d (lb/yr)	Annual Permit Limit (lb/yr)
PCE	127-18-4	19,000	0.0116	0.031	101	270
TCE	79-01-6	500	0.000304	0.014	2.67	120
cis-1,2-DCE	156-59-2	500	0.000304	0.63	2.67	5,510
Benzene	71-43-2	3,000	0.00183	NA ^e	16.0	NA ^e

^aConcentration in the exhaust stream before entering the carbon bed, per the sampling performed on March 12, 2007. TCE and cis-1,2-DCE were not detected; therefore, half of their detection limit was used for this analysis.

^bCalculated Hourly Emission Rate (lb/hr) = Concentration (ug/m³) / 453,592,370 (ug/lb) / 35.315 (ft³/m³) * 162.5 (ft³/min) * 60 (min/hr)

^cBased on the flow rate as measured during testing (i.e., 162.5 cfm).

^dCalculated Annual Emission Rate (lb/yr) = Hourly Emission Rate (lb/hr) * 8,760 (hr/yr)

^eThere is no permit limit for benzene for this facility.



Table 3

*Former National Heatset Printing Site
Farmingdale, New York*

DAR-1 Modeling Results

Contaminant	CAS Number	Averaging Period	Predicted Maximum Ambient Concentration (ug/m³)	AGC/SGC^a (ug/m³)	Percent AGC/SGC (%)
PCE	127-18-4	1-Hour	10.2	1,000	1
		Annual	0.222	1.0	22
TCE	79-01-6	1-Hour	0.268	54,000	<1
		Annual	0.00587	0.5	1
cis-1,2-DCE	156-59-2	Annual	0.00586	1,900	<1
Benzene	71-43-2	1-Hour	1.62	1,300	<1
		Annual	0.0352	0.13	27

^aNYSDEC "DAR-1 AGC/SGC Tables" Division of Air Resources, Air Toxics Section, December 22, 2003.



ATTACHMENT A

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

POST BLEED

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: MF0309

Matrix: (soil/water) AIR

Lab Sample ID: F0309-01A

Sample wt/vol: 25 (g/mL) ML

Lab File ID: V6F0958

Level: (low/med) LOW

Date Received: 03/14/07

% Moisture: not dec. _____

Date Analyzed: 03/20/07

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) MG/M3 Q

CAS NO.	COMPOUND		
75-71-8	Dichlorodifluoromethane	1	U
74-87-3	Chloromethane	1	U
75-01-4	Vinyl Chloride	1	U
74-83-9	Bromomethane	1	U
75-00-3	Chloroethane	1	U
75-69-4	Trichlorofluoromethane	1	U
75-35-4	1,1-Dichloroethene	1	U
67-64-1	Acetone	1	U
74-88-4	Iodomethane	1	U
75-15-0	Carbon Disulfide	1	U
75-09-2	Methylene Chloride	1	U
156-60-5	trans-1,2-Dichloroethene	1	U
1634-04-4	Methyl tert-butyl ether	1	U
75-34-3	1,1-Dichloroethane	1	U
108-05-4	Vinyl acetate	1	U
78-93-3	2-Butanone	1	U
156-59-2	cis-1,2-Dichloroethene	1	U
590-20-7	2,2-Dichloropropane	1	U
74-97-5	Bromochloromethane	1	U
67-66-3	Chloroform	1	U
71-55-6	1,1,1-Trichloroethane	1	U
563-58-6	1,1-Dichloropropene	1	U
56-23-5	Carbon Tetrachloride	1	U
107-06-2	1,2-Dichloroethane	1	U
71-43-2	Benzene	3	
79-01-6	Trichloroethene	1	U
78-87-5	1,2-Dichloropropane	1	U
74-95-3	Dibromomethane	1	U
75-27-4	Bromodichloromethane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
108-10-1	4-Methyl-2-pentanone	1	U
108-88-3	Toluene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
79-00-5	1,1,2-Trichloroethane	1	U

FORM I VOA

OLM03.0

0005

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

POST BLEED

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: MF0309

Matrix: (soil/water) AIR

Lab Sample ID: F0309-01A

Sample wt/vol: 25 (g/mL) ML

Lab File ID: V6F0958

Level: (low/med) LOW

Date Received: 03/14/07

% Moisture: not dec. _____

Date Analyzed: 03/20/07

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg) MG/M3

Q

142-28-9-----	1,3-Dichloropropane	1	U
127-18-4-----	Tetrachloroethene	16	
591-78-6-----	2-Hexanone	1	U
124-48-1-----	Dibromochloromethane	1	U
106-93-4-----	1,2-Dibromoethane	1	U
108-90-7-----	Chlorobenzene	1	U
630-20-6-----	1,1,1,2-Tetrachloroethane	1	U
100-41-4-----	Ethylbenzene	1	U
-----	m,p-Xylene	1	U
95-47-6-----	o-Xylene	1	U
1330-20-7-----	Xylene (Total)	1	U
100-42-5-----	Styrene	1	U
75-25-2-----	Bromoform	1	U
98-82-8-----	Isopropylbenzene	1	U
79-34-5-----	1,1,2,2-Tetrachloroethane	1	U
108-86-1-----	Bromobenzene	1	U
96-18-4-----	1,2,3-Trichloropropane	1	U
103-65-1-----	n-Propylbenzene	1	U
95-49-8-----	2-Chlorotoluene	1	U
108-67-8-----	1,3,5-Trimethylbenzene	1	U
106-43-4-----	4-Chlorotoluene	1	U
98-06-6-----	tert-Butylbenzene	1	U
95-63-6-----	1,2,4-Trimethylbenzene	1	U
135-98-8-----	sec-Butylbenzene	1	U
99-87-6-----	4-Isopropyltoluene	1	U
541-73-1-----	1,3-Dichlorobenzene	1	U
106-46-7-----	1,4-Dichlorobenzene	1	U
104-51-8-----	n-Butylbenzene	1	U
95-50-1-----	1,2-Dichlorobenzene	1	U
96-12-8-----	1,2-Dibromo-3-chloropropane	1	U
120-82-1-----	1,2,4-Trichlorobenzene	1	U
87-68-3-----	Hexachlorobutadiene	1	U
91-20-3-----	Naphthalene	1	U
87-61-6-----	1,2,3-Trichlorobenzene	1	U

FORM I VOA

OLM03.0

0006

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

POST BLEEDRE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: MF0309

Matrix: (soil/water) AIR

Lab Sample ID: F0309-01ARE

Sample wt/vol: 25 (g/mL) ML

Lab File ID: V6F0960

Level: (low/med) LOW

Date Received: 03/14/07

% Moisture: not dec. _____

Date Analyzed: 03/20/07

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(ug/L or ug/Kg) MG/M3

Q

75-71-8-----	Dichlorodifluoromethane	1	U
74-87-3-----	Chloromethane	1	U
75-01-4-----	Vinyl Chloride	1	U
74-83-9-----	Bromomethane	1	U
75-00-3-----	Chloroethane	1	U
75-69-4-----	Trichlorofluoromethane	1	U
75-35-4-----	1,1-Dichloroethene	1	U
67-64-1-----	Acetone	1	U
74-88-4-----	Iodomethane	1	U
75-15-0-----	Carbon Disulfide	1	U
75-09-2-----	Methylene Chloride	1	U
156-60-5-----	trans-1,2-Dichloroethene	1	U
1634-04-4-----	Methyl tert-butyl ether	1	U
75-34-3-----	1,1-Dichloroethane	1	U
108-05-4-----	Vinyl acetate	1	U
78-93-3-----	2-Butanone	1	U
156-59-2-----	cis-1,2-Dichloroethene	1	U
590-20-7-----	2,2-Dichloropropane	1	U
74-97-5-----	Bromochloromethane	1	U
67-66-3-----	Chloroform	1	U
71-55-6-----	1,1,1-Trichloroethane	1	U
563-58-6-----	1,1-Dichloropropene	1	U
56-23-5-----	Carbon Tetrachloride	1	U
107-06-2-----	1,2-Dichloroethane	1	U
71-43-2-----	Benzene	0.7	J
79-01-6-----	Trichloroethene	1	U
78-87-5-----	1,2-Dichloropropane	1	U
74-95-3-----	Dibromomethane	1	U
75-27-4-----	Bromodichloromethane	1	U
10061-01-5-----	cis-1,3-Dichloropropene	1	U
108-10-1-----	4-Methyl-2-pentanone	1	U
108-88-3-----	Toluene	1	U
10061-02-6-----	trans-1,3-Dichloropropene	1	U
79-00-5-----	1,1,2-Trichloroethane	1	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

POST BLEEDRE

Lab Name: MITKEM CORPORATION

Contract:

Lab Code: MITKEM

Case No.:

SAS No.:

SDG No.: MF0309

Matrix: (soil/water) AIR

Lab Sample ID: F0309-01ARE

Sample wt/vol: 25 (g/mL) ML

Lab File ID: V6F0960

Level: (low/med) LOW

Date Received: 03/14/07

% Moisture: not dec. _____

Date Analyzed: 03/20/07

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) MG/M3	Q
142-28-9	1,3-Dichloropropane	1	U
127-18-4	Tetrachloroethene	19	
591-78-6	2-Hexanone	1	U
124-48-1	Dibromochloromethane	1	U
106-93-4	1,2-Dibromoethane	1	U
108-90-7	Chlorobenzene	1	U
630-20-6	1,1,1,2-Tetrachloroethane	1	U
100-41-4	Ethylbenzene	1	U
	m,p-Xylene	1	U
95-47-6	o-Xylene	1	U
1330-20-7	Xylene (Total)	1	U
100-42-5	Styrene	1	U
75-25-2	Bromoform	1	U
98-82-8	Isopropylbenzene	1	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-86-1	Bromobenzene	1	U
96-18-4	1,2,3-Trichloropropane	1	U
103-65-1	n-Propylbenzene	1	U
95-49-8	2-Chlorotoluene	1	U
108-67-8	1,3,5-Trimethylbenzene	1	U
106-43-4	4-Chlorotoluene	1	U
98-06-6	tert-Butylbenzene	1	U
95-63-6	1,2,4-Trimethylbenzene	1	U
135-98-8	sec-Butylbenzene	1	U
99-87-6	4-Isopropyltoluene	1	U
541-73-1	1,3-Dichlorobenzene	1	U
106-46-7	1,4-Dichlorobenzene	1	U
104-51-8	n-Butylbenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	1	U
87-68-3	Hexachlorobutadiene	1	U
91-20-3	Naphthalene	1	U
87-61-6	1,2,3-Trichlorobenzene	1	U

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: MITKEM CORPORATION Contract:
Lab Code: MITKEM Case No.: SAS No.: SDG No.: MF0309
Lab File ID (Standard): V6F0951 Date Analyzed: 03/20/07
Instrument ID: V6 Time Analyzed: 1240
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1	RT #	IS2 (CBZ)	RT #	IS3 (DCB)	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	856359	6.63	634413	10.34	330791	13.21
UPPER LIMIT	1712718	7.13	1268826	10.84	661582	13.71
LOWER LIMIT	428180	6.13	317207	9.84	165396	12.71
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 VBLK6M	718296	6.63	491812	10.35	189313	13.21
02 V6MLCS	749527	6.62	567412	10.34	295927	13.21
03 POST BLEED	492667	6.62	350571	10.35	124242*	13.21
04 POST BLEEDRE	443249	6.63	335473	10.35	117536*	13.21
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 = Fluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

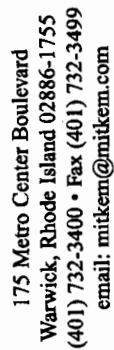
Lab Name: MITKEM CORPORATION Contract:
Lab Code: MITKEM Case No.: SAS No.: SDG No.: MF0309
Lab File ID (Standard): V6F1041 Date Analyzed: 03/23/07
Instrument ID: V6 Time Analyzed: 1000
GC Column: DB-624 ID: 0.25 (mm) Heated Purge: (Y/N) N

	IS1	RT #	IS2 (CBZ)	RT #	IS3 (DCB)	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	2604442	6.62	1889841	10.35	969540	13.21
UPPER LIMIT	5208884	7.12	3779682	10.85	1939080	13.71
LOWER LIMIT	1302221	6.12	944921	9.85	484770	12.71
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 VBLK6N	2772427	6.62	1993587	10.35	1030623	13.21
02 V6NLCS	2698616	6.63	1936404	10.35	979575	13.21
03 EFFLUENT	2233780	6.62	1607732	10.35	839345	13.21
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 = Fluorobenzene
IS2 (CBZ) = Chlorobenzene-d5
IS3 (DCB) = 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = + 0.50 minutes of internal standard RT
RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits.



CHAIN-OF-CUSTODY RECORD

[illegible]

0012

WHITE: LABORATORY COPY

YELLOW: REPORT COPY

PINK: CLIENT'S COPY

ATTACHMENT B

***** DAR-1 ANALYSIS *****

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

LOC	FAC	E.P.	CAS #	SOURCE	HA, or h(AREA) TYPE	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: National Heatset Printing															
Application:															
SIC Code: 0 Source Code: UTME: 0. UTMN: 0. ZONE: 0 BL FACING DIRECTION: 0.0 %CONTROL: 0.0000															
00001	00127-18-4	POINT	10.	30.	4.	100.	38.20	200.00	0.01160	101.	1.	275.	340.		
Facility Name & Address: National Heatset Printing															
Application:															
SIC Code: 0 Source Code: UTME: 0. UTMN: 0. ZONE: 0 BL FACING DIRECTION: 0.0 %CONTROL: 0.0000															
00001	00079-01-6	POINT	10.	30.	4.	100.	38.20	200.00	0.00030	3.	1.	275.	340.		
Facility Name & Address: National Heatset Printing															
Application:															
SIC Code: 0 Source Code: UTME: 0. UTMN: 0. ZONE: 0 BL FACING DIRECTION: 0.0 %CONTROL: 0.0000															
00001	00156-59-2	POINT	10.	30.	4.	100.	38.20	200.00	0.00030	3.	1.	275.	340.		
Facility Name & Address: National Heatset Printing															
Application:															
SIC Code: 0 Source Code: UTME: 0. UTMN: 0. ZONE: 0 BL FACING DIRECTION: 0.0 %CONTROL: 0.0000															
00001	00071-43-2	POINT	10.	30.	4.	100.	38.20	200.00	0.00183	16.	1.	275.	340.		

CONTAMINANT TOXICITY PROFILE FOR DAR-1 ANALYSIS

CONTAMINANT NAME	CAS NUMBER	SGC ug/m3	HOW SGC ASSIGNED	AGC ug/m3	HOW AGC ASSIGNED	DAR TOXICITY	COMMENTS
BENZENE	00071-43-2	1300.00000	NYSDEC	0.130000000	EPA	HIGH	A,H,U
TRICHLOROETHYLENE	00079-01-6	54000.00000	ACGIH STEL	0.500000000	NYSDEC	MODERATE	H,I,U
TETRACHLOROETHYLENE	00127-18-4	1000.00000	NYSDOH	1.000000000	NYSDOH	MODERATE	H,I,U
DICHLOROETHYLENE,cis	00156-59-2	0.00000	NO SGC EXISTS	1900.000000000	ACGIH TWA-TLV	MODERATE	

COMMENTS :

(A) ACGIH Human Carcinogen.

(H) HAP identified by 1990 CAAA.

(I) Refer to ACGIH Handbook.

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

CONTAMINANT EMISSIONS SUMMARY FOR DAR-1 ANALYSIS

CAS NUMBER	CONTAMINANT NAME	# OF EMISSIONS POINTS PER CONTAMINANT	EMISSIONS (lbs/hour)	EMISSIONS (lbs/year)
00071-43-2	BENZENE	1	0.00183000	16.00000
00079-01-6	TRICHLOROETHYLENE	1	0.00030400	2.67000
00127-18-4	TETRACHLOROETHYLENE	1	0.01160000	101.00000
00156-59-2	DICHLOROETHYLENE, cis	1	0.00030400	2.67000

SUMMARY TOTALS

0.01403800

122.340000

EMISSION POINT AND CONTAMINANT IMPACT SUMMARY OF DAR-1 ANALYSIS

LOC	FAC	E.P.	CAS NUMBER	EMISSIONS #/HOUR	EMISSIONS #/YEAR	ANNUAL	SHORT-TERM	CAVITY	POINT or AREA SOURCE	
						EMISSIONS #/HOUR	IMPACT	IMPACT	IMPACT	
							(Cav, Pt, Area) ug/m3	ACTUAL ANNUAL ug/m3	POTENTIAL ANNUAL ug/m3	ACTUAL ANNUAL ug/m3
*****	****	*****	*****	*****	*****	*****	*****	*****	*****	*****
		00001	00127-18-4	0.011600	101.0000	0.011530	10.243770	0.000000	0.223107	0.222008
		00001	00079-01-6	0.000304	2.6700	0.000305	0.268457	0.000000	0.005847	0.005869
		00001	00156-59-2	0.000304	2.6700	0.000305	0.268457	0.000000	0.005847	0.005869
		00001	00071-43-2	0.001830	16.0000	0.001826	1.616043	0.000000	0.035197	0.035170

SUMMARY TOTALS				0.014038	122.3400	0.013966	12.396727	0.000000	0.269998	0.268915

EMISSION POINT AND CONTAMINANT ASSESSMENT OF DAR-1 ANALYSIS

LOC	FAC	E.P.	CAS NUMBER	AGC ug/m3	SGC ug/m3	MAXIMUM	SHORT-TERM	CAVITY	POINT or AREA SOURCE	
						(Cav, Pt, Area) % OF SGC	IMPACT	IMPACT	IMPACT	
								ACTUAL ANNUAL % OF AGC	POTENTIAL ANNUAL % OF AGC	ACTUAL ANNUAL % OF AGC
*****	****	*****	*****	*****	*****	*****	*****	*****	*****	*****
		00001	00127-18-4	1.000000000	1000.0000	1.0244		0.0000	22.3107	22.2008
		00001	00079-01-6	0.500000000	54000.0000	0.0005		0.0000	1.1694	1.1738
		00001	00156-59-2	1900.000000000	0.0000	0.0000		0.0000	0.0003	0.0003
		00001	00071-43-2	0.130000000	1300.0000	0.1243		0.0000	27.0746	27.0535

SUMMARY TOTALS						1.1492		0.0000	50.5550	50.4284

CONTAMINANT IMPACT SUMMARY OF DAR-1 ANALYSIS

CAS NUMBER	EMISSIONS #/HOUR	EMISSIONS #/YEAR	ANNUAL EMISSIONS #/HOUR	SUMMATION OF	SUMMATION OF	SUMMATION OF POINT or AREA	
				SHORT-TERM	CAVITY IMPACTS	SOURCE IMPACTS	
				IMPACTS,			
				MAXIMUM	ACTUAL	POTENTIAL	ACTUAL
				(Cav, Pt, Area)	ANNUAL	ANNUAL	ANNUAL
				ug/m3	ug/m3	ug/m3	ug/m3
*****	*****	*****	*****	*****	*****	*****	
00071-43-2	0.001830	16.0000	0.001827	1.616043	0.000000	0.035197	0.035170
00079-01-6	0.000304	2.6700	0.000305	0.268457	0.000000	0.005847	0.005869
00127-18-4	0.011600	101.0000	0.011530	10.243770	0.000000	0.223107	0.222008
00156-59-2	0.000304	2.6700	0.000305	0.268457	0.000000	0.005847	0.005869

SUMMARY TOTALS	0.014038	122.3400	0.013966	12.396727	0.000000	0.269998	0.268915

CONTAMINANT ASSESSMENT SUMMARY OF DAR-1 ANALYSIS

CAS NUMBER	AGC ug/m3	SGC ug/m3	SUMMATION OF	SUMMATION OF	SUMMATION OF POINT or AREA	
			SHORT-TERM	CAVITY IMPACTS	SOURCE IMPACTS	
			IMPACTS,			
			MAXIMUM	ACTUAL	POTENTIAL	ACTUAL
			(Cav, Pt, Area)	ANNUAL	ANNUAL	ANNUAL
			% OF SGC	% OF AGC	% OF AGC	% OF AGC
*****	*****	*****	*****	*****	*****	
00071-43-2	0.130000000	1300.0000	0.1243	0.0000	27.0746	27.0535
00079-01-6	0.500000000	54000.0000	0.0005	0.0000	1.1694	1.1738
00127-18-4	1.000000000	1000.0000	1.0244	0.0000	22.3107	22.2008
00156-59-2	1900.000000000	0.0000	0.0000	0.0000	0.0003	0.0003

SUMMARY TOTALS			1.1492	0.0000	50.5550	50.4284