correspondence. hw 734052. 1999. pdf

O'BRIEN & GERE
ENGINEERS, INC.

February 9, 1999

FEB 16

Mr. David Crosby, P.E.
Bureau of Construction Services
Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-7010

Re: Former Accurate Die Casting Site Fayetteville, NY

File: 2488/23123

Dear Mr. Crosby:

Enclosed are four copies of the monthly progress report, required by the Order on Consent (#A7-0318-94-10) for the former Accurate Die Casting site in Fayetteville, New York, for the month of January 1999. Included in the progress report are the results of the monitoring activities associated with the SPDES Fact Sheet for the ground water treatment system through January 1999. If you have any questions regarding these reports, please do not hesitate to call me.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Timothy M. Eddy, HGW
Senior Project Scientist

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Attachments

cc: V. Nattanmai, P.E. - NYSDEC
A. English - NYSDEC
T. Male - NYSDEC
Central Field Unit: Project Attorney Accurate Die Site - NYSDEC
C. Branagh, P.E. - NYSDEC Region 7
Director, Bureau of Environmental Exposure Investigation - NYSDOH (2 copies)
H. Hamel - NYSDOH
C. Johnson, Esq. - ITT Corporation
C. Salcines - ITT Corporation
R. Alessi, Esq. - LeBoeuf, Lamb, Greene & MacRae
M. Peters, Esq. - LeBoeuf, Lamb, Greene & MacRae
T. Brown, P.E. - O'Brien & Gere Technical Services, Inc.
Al Farrell, P.E.- O'Brien & Gere Engineers, Inc.

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... and offices in major U.S. cities

FORMER ACCURATE DIE CASTING SITE
FAYETTEVILLE, NEW YORK

Monthly Progress Report for: January 1999

(a) Activities Performed/Correspondences with NYSDEC

1. During the month of January 1999, O'Brien & Gere operated the ground water collection and treatment system on behalf of ITT Industries. Between January 1 through January 31, 1999, a total of 319,210 gallons of ground water was treated: 224,350 gallons were recovered from recovery well RW-1; 89,470 gallons were recovered from RW-2; and 5,390 gallons were recovered from the sump located outside the northeast corner of the facility. As of February 1,1999, a total of 24,687,840 gallons of ground water has been treated since startup on February 5, 1996.

   The daily ground water yield from recovery well RW-1 decreased from 9,890 gallons on January 4, 1999 to 4,190 gallons on January 29, 1999.

2. During the month of January 1999, O'Brien & Gere performed the sampling activities associated with the Sampling and Analysis Plan (March 1996), revised according to the NYSDEC letter dated April 1, 1997, and the SPDES Fact Sheet (#734052) required by the Consent Order. The results of the SPDES sampling of the ground water treatment system effluent are discussed in Item b.

3. A schedule for the construction of the ground water collection trench was transmitted to the NYSDEC on Friday, January 29, 1999.

(b) Sampling and Test Results

1. The analytical results associated with the SPDES Fact Sheet monitoring activities performed in January 1999 are summarized in Table 1. The laboratory analytical data sheets are provided as Attachment A.

(c) Projected Activities within next 45 days

1. Continue operation of the ground water recovery and treatment system.

2. Evaluate and correct the cause of the decreasing ground water yields from recovery well RW-1.

3. Prepare and submit the annual report summarizing 1998 remedial activities.

(d) Project Schedule

1. Ground water monitoring activities will continue to be performed in accordance with the NYSDEC-approved Sampling & Analysis Plan dated March 1996, as modified in accordance with the recommendations of the Annual Report for 1997 submitted to the NYSDEC on January 27, 1998. Also, the treatment system performance monitoring will continue to be conducted in accordance with the SPDES Permit fact sheet, as modified on March 13, 1997 and November 21, 1997.

(e) Activities in support of Community Relations Plan

1. None

(f) Exceedences to SPDES Fact Sheet Limits

1. None

O'BRIEN & GERE
ENGINEERS, INC.

Table 1
Accurate Die Casting Site
Fayetteville, New York
Monitoring Requirements and Effluent Data

Analyte (units)	Monitoring Requirements				Effluent	Effluent	Effluent	Effluent
	Discharge Limitation Daily Average	Discharge Limitation Daily Maximum	Minimum Measurement Frequency(1)	Sample Type	01/05/99	01/06/99	01/07/99	01/12/99
Flow (GPD)	Monitor	150000	Continuous	Meter	12450	---	13137	11110
pH (SU)	6.5 - 8.5		2/Week	Grab	7.80	---	7.80	7.74
Residue, non-filterable (mg/L)	Monitor	20	Weekly	3-hr comp.	---	5 U	---	---
Total dissolved solids (TDS) (mg/L)	Monitor	Monitor	Weekly	3-hr comp.	---	1100	---	---
CBOD5 (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	---	5 U	---	---
TKN (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	---	0.4 U	---	---
TOD (mg/L)	Monitor	15	Quarterly	Calculated	---	9.3 U	---	---
Dissolved Oxygen (mg/L)	Monitor	7 Min	Quarterly	Grab	---	8.25	---	---
Aluminum, dissolved (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	---	0.1 U	---	---
Antimony, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	0.06 U	---	---
Chromium, total (mg/L)	Monitor	0.5	Quarterly	3-hr comp.	---	0.01 U	---	---
Cobalt, total (mg/L)	Monitor	0.01	Quarterly	3-hr comp.	---	0.01 U	---	---
Copper, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	0.01 U	---	---
Iron, total (mg/L)	Monitor	0.3	Quarterly	3-hr comp.	---	0.05 U	---	---
Lead, total (mg/L)	Monitor	0.02	Quarterly	3-hr comp.	---	0.005 U	---	---
Mercury, total (mg/L)	Monitor	0.0008	2/Month	3-hr comp.	---	0.0002 U	---	---
Nickel, total (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	---	0.05 U	---	---
Silver, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	0.01 U	---	---
Vanadium, total (mg/L)	Monitor	0.03	Quarterly	3-hr comp.	---	0.03 U	---	---
Zinc, total (mg/L)	Monitor	0.3	2/Month	3-hr comp.	---	0.02	---	---
cis-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	0.50 U	---	---
trans-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	0.50 U	---	---
Methylene chloride (ug/L)	Monitor	50	2/Month	Grab	---	2.0 U	---	---
1,1,2,2-Tetrachloroethane (ug/L)	Monitor	30	2/Month	Grab	---	0.50 U	---	---
Tetrachloroethene (ug/L)	Monitor	20	2/Month	Grab	---	0.50 U	---	---
Toluene (ug/L)	Monitor	20	2/Month	Grab	---	0.50 U	---	---
Trichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	0.50 U	---	---
Acetone (ug/L)	Monitor	1000	2/Month	Grab	---	10 U	---	---
2-Hexanone (ug/L)	Monitor	1000	2/Month	Grab	---	5.0 U	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	Monitor	1000	2/Month	Grab	---	5.0 U	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.
--- - Not analyzed, NA - Data not available
U - Not Detected, J - Estimated
TOD = 1.5 X CBOD5 + 4.5 X TKN

O'BRIEN & GERE
ENGINEERS, INC.

Table 1
Accurate Die Casting Site
Fayetteville, New York
Monitoring Requirements and Effluent Data

Analyte	Effluent 01/13/99	Effluent 01/14/99	Effluent 01/19/99	Effluent 01/20/99	Effluent 01/21/99	Effluent 01/26/99	Effluent 01/27/99	Effluent 01/28/99
Flow (GPD)	---	10250	7387	---	6350	8430	---	8020
pH (SU)	---	7.78	7.77	---	7.75	7.85	---	7.81
Residue, non-filterable (mg/L)	5 U	---	---	5 U	---	---	5 U	---
Total dissolved solids (TDS) (mg/L)	1000	---	---	680	---	---	560	---
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	---	0.0002 U	---	---	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	---	0.01 U	---	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Methylene chloride (ug/L)	---	---	---	2.0 U	---	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	0.50 U	---	---	---	---
Tetrachloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Toluene (ug/L)	---	---	---	0.50 U	---	---	---	---
Trichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Acetone (ug/L)	---	---	---	10 U	---	---	---	---
2-Hexanone (ug/L)	---	---	---	5.0 U	---	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	5.0 U	---	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.
--- - Not analyzed, NA - Data not available
U - Not Detected, J - Estimated
TOD = 1.5 X CBOD5 + 4.5 X TKN

ATTACHMENT A

ANALYTICAL RESULTS

O'Brien & Gere Laboratories, Inc.

Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.
Project: Accurate Die Casting - Fayetteville, NY
Proj. Desc: Weekly Effluent Sampling

Job No.: 3435.021.517
Certification NY No.: 10155

Sample: K2995
Samp. Description: WTP Effluent

Collected: 12/30/98
Received: 12/30/98 15:45

Matrix: Water

Parameter	Result	Units	Method	Prepared	Analyzed	QC Batch	Note
Total dissolved solids	1100.	mg/L	EPA 160.1		01/06/99	01069916	
Total suspended solids	<5.	mg/L	EPA 160.2		01/04/99	010499W11	

Notes:

J-Estimated value

Authorized: Monika Santucci
Date: January 8,1999 Monika Santucci

O'Brien & Gere Laboratories, Inc.

5000 Brittonfield Parkway
East Syracuse, New York 13057
(315) 437-0200

338

Chain of Custody

Client: O'BRIEN + GERE TECHNICAL SERVICES INC

Project: ITT FINANCIAL (FORMER ACCURATE DIE)

Sampled by: JERRY BORN

Client Contact: JERRY BORN / TIM EDDY Phone # 6370109 2467

Sample Description

Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers	Analysis/Method: TSS/TDS	Comments
WTP EFFLUENT	12/30/93	10:35 AM	WATER	COMP	1	X	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by: [signature]	Date: 12/30/93	Time: 1545	Received by Lab: Mark F. Jackson	Date: 12/30/93	Time: 15:45
Shipment Method: HAND DELIVERED			Airbill Number:		

Turnaround Time Required:
Routine X
Rush (Specify)

Comments:

Cooler Temperature: 3°C

Original-Laboratory Copy-Client

O'Brien & Gere Laboratories,Inc.

Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.
Project: Accurate Die Casting - Fayetteville, NY
Proj. Desc: Weekly Effluent Sampling

Job No.: 3435.021.517
Certification NY No.: 10155

Sample: K3931
Samp. Description: WTP Effluent

Collected: 01/13/99 10:15
Received: 01/13/99 15:40

Matrix: Water

Parameter	Result	Units	Method	Prepared	Analyzed	QC Batch	Note
Total dissolved solids	1000.	mg/L	EPA 160.1		01/20/99	012099W12	
Total suspended solids	<5.	mg/L	EPA 160.2		01/14/99	011499W11	

Notes:

J-Estimated value

Authorized: Monika Santucci
Date: January 22,1999 Monika Santucci

O'Brien & Gere Laboratories, Inc.

5000 Brittonfield Parkway
East Syracuse, New York 13057
(315) 437-0200

454

Chain of Custody

Client: O'BRIEN & GERE TECHNICAL SERV. INC
Project: ITT FINANCIAL (FORMER ACCURATE DIE)
Sampled by: JERRY BORN
Client Contact: JERRY BORN, TIM EDDY Phone # 6730109, 2467

Sample Description

Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers	Analysis/Method: TSS/TDS	Comments
WTP EFFLUENT	1/13/99	10:15 AM	WATER	COMP	1	+	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by: [signature]	Date: 1/13/99	Time: 1540	Received by Lab: [signature]	Date: 1/13/99	Time: 1540
Shipment Method: HAND DELIVERED			Airbill Number:		

Turnaround Time Required:
Routine X
Rush (Specify)

Comments:

Cooler Temperature: 1°C

Original-Laboratory Copy-Client

O'Brien & Gere Laboratories, Inc.

Analytical Results Method: 8260

Client: O'Brien & Gere Engineers, Inc.
Project: Accurate Die Casting - Fayetteville, NY
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517
Certification NY No.: 10155

Sample: K3388
Samp. Description: WTP Effluent - Grab
Instrument: HP5970 GC/MS#2
Units: ug/L
Number of analytes: 13

Collected: 01/06/99
Received: 01/06/99
Prepared:

Matrix: Water
QC Batch: 010799W2
%Solids:
Purge volume: 25 mL

Parameter	Result	Surrog Limits	Dilution	Analyzed	Notes
Acetone	<10.		1	01/08/99	
Methylene chloride	<2.0		1	01/08/99	
trans-1,2-Dichloroethene	<.50		1	01/08/99	
cis-1,2-Dichloroethene	<.50		1	01/08/99	
Trichloroethene	<.50		1	01/08/99	
4-Methyl-2-pentanone	<5.0		1	01/08/99	
Toluene	<.50		1	01/08/99	
2-Hexanone	<5.0		1	01/08/99	
Tetrachloroethene	<.50		1	01/08/99	
1,1,2,2-Tetrachloroethane	<.50		1	01/08/99	
Dibromofluoromethane (surrogate)	120.%	61-136	1	01/08/99	
Toluene-d8 (surrogate)	108.%	84-114	1	01/08/99	
Bromofluorobenzene (surrogate)	104.%	77-117	1	01/08/99	

Notes:

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: January 11, 1999 Monika Santucci

5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

O'Brien & Gere Laboratories, Inc.

Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.
Project: Accurate Die Casting - Fayetteville, NY
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517
Certification NY No.: 10155

Sample: K3386
Samp. Description: WTP Influent
Primary column: Y
Units: ug/L
Column: DB-VRX 75m X .45mm ID
Dilution: 50 Instrument: 9001

Collected: 01/06/99
Received: 01/06/99
Prepared:
Analyzed: 01/19/99

Matrix: Water
QC Batch: 011999W1
%Solids:
Purge volume: 5 ml

Number of analytes: 36

Parameter	Result	Col	Surrog Limits	Notes
Benzene	<50.	1		
Bromodichloromethane	<50.	1		
Bromoform	<500.	1		
Bromomethane	<500.	1		
Carbon tetrachloride	<50.	1		
Chlorobenzene	<50.	1		
Chloroethane	<50.	1		
2-Chloroethylvinyl ether	<500.	1		
Chloroform	<50.	1		
Chloromethane	<500.	1		
Dibromochloromethane	<50.	1		
1,2-Dichlorobenzene	<250.	1		
1,3-Dichlorobenzene	<250.	1		
1,4-Dichlorobenzene	<250.	1		
Dichlorodifluoromethane	<500.	1		
1,1-Dichloroethane	<50.	1		
1,2-Dichloroethane	<50.	1		
1,1-Dichloroethylene	<50.	1		
cis-1,2-Dichloroethylene	<50.	1		
trans-1,2-Dichloroethylene	<50.	1		
Dichloromethane	<50.	1		
1,2-Dichloropropane	<50.	1		
cis-1,3-Dichloropropylene	<50.	1		
trans-1,3-Dichloropropylene	<50.	1		
Ethylbenzene	<50.	1		
1,1,2,2-Tetrachloroethane	<50.	1		
Tetrachloroethylene	<50.	1		
Toluene	<50.	1		

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: January 20, 1999 Monika Santucci

5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

O'Brien & Gere Laboratories,Inc.

Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.
Project: Accurate Die Casting - Fayetteville, NY
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517
Certification NY No.: 10155

Sample: K3386
Samp. Description: WTP Influent
Primary column: Y
Units: ug/L
Column: DB-VRX 75m X .45mm ID
Dilution: 50 Instrument: 9001

Collected: 01/06/99
Received: 01/06/99
Prepared:
Analyzed: 01/19/99

Matrix: Water
QC Batch: 011999W1
%Solids:
Purge volume: 5 ml

Number of analytes: 36

Parameter	Result	Col	Surrog Limits	Notes
1,1,1-Trichloroethane	<50.	1		
1,1,2-Trichloroethane	<50.	1		
Trichloroethylene	550.	1		
Trichlorofluoromethane	<50.	1		
Vinyl Chloride	<50.	1		
Xylenes (total)	<150.	1		
2-Chloropropane (surrogate)	112.%	1	69-118	
Fluorobenzene (surrogate)	99.%	1	85-119	

Notes:

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: January 20,1999 Monika Santucci

5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

O'Brien & Gere Laboratories,Inc.

Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.
Project: Accurate Die Casting - Fayetteville, NY
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517
Certification NY No.: 10155

Sample: K3387
Samp. Description: WTP Between GACs
Primary column: Y
Units: ug/L
Column: DB-VRX 75m X .45mm ID
Dilution: 1 Instrument: 9001

Collected: 01/06/99
Received: 01/06/99
Prepared:
Analyzed: 01/19/99

Matrix: Water
QC Batch: 011999W1
%Solids:
Purge volume: 5 ml

Number of analytes: 36

Parameter	Result	Col	Surrog Limits	Notes
Benzene	<1.	1		
Bromodichloromethane	<1.	1		
Bromoform	<10.	1		
Bromomethane	<10.	1		
Carbon tetrachloride	<1.	1		
Chlorobenzene	<1.	1		
Chloroethane	<1.	1		
2-Chloroethylvinyl ether	<10.	1		
Chloroform	<1.	1		
Chloromethane	<10.	1		
Dibromochloromethane	<1.	1		
1,2-Dichlorobenzene	<5.	1		
1,3-Dichlorobenzene	<5.	1		
1,4-Dichlorobenzene	<5.	1		
Dichlorodifluoromethane	<10.	1		
1,1-Dichloroethane	<1.	1		
1,2-Dichloroethane	<1.	1		
1,1-Dichloroethylene	<1.	1		
cis-1,2-Dichloroethylene	<1.	1		
trans-1,2-Dichloroethylene	<1.	1		
Dichloromethane	<1.	1		
1,2-Dichloropropane	<1.	1		
cis-1,3-Dichloropropylene	<1.	1		
trans-1,3-Dichloropropylene	<1.	1		
Ethylbenzene	<1.	1		
1,1,2,2-Tetrachloroethane	<1.	1		
Tetrachloroethylene	<1.	1		
Toluene	<1.	1		

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: January 20,1999 Monika Santucci

5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

O'Brien & Gere Laboratories, Inc.

Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.
Project: Accurate Die Casting - Fayetteville, NY
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517
Certification NY No.: 10155

Sample: K3387
Samp. Description: WTP Between GACs
Primary column: Y
Units: ug/L
Column: DB-VRX 75m X .45mm ID
Dilution: 1 Instrument: 9001

Collected: 01/06/99
Received: 01/06/99
Prepared:
Analyzed: 01/19/99

Matrix: Water
QC Batch: 011999W1
%Solids:
Purge volume: 5 ml

Number of analytes: 36

Parameter	Result	Col	Surrog Limits	Notes
1,1,1-Trichloroethane	<1.	1		
1,1,2-Trichloroethane	<1.	1		
Trichloroethylene	<1.	1		
Trichlorofluoromethane	<1.	1		
Vinyl Chloride	<1.	1		
Xylenes (total)	<3.	1		
2-Chloropropane (surrogate)	113.%	1	69-118	
Fluorobenzene (surrogate)	99.%	1	85-119	

Notes:

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: January 20, 1999 Monika Santucci

O'Brien & Gere Laboratories,Inc.

Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.
Project: Accurate Die Casting - Fayetteville, NY
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517
Certification NY No.: 10155

Sample: K3389
Samp. Description: WTP Effluent - Composite
Units: mg/L

Collected: 01/06/99
Received: 01/06/99

Matrix: Water
%Solids:
Number of analytes: 11

Parameter	Result	Method	Prepared	Analyzed	QC Batch	Dilut.	Note
Antimony	<.06	200.7	01/12/99	01/14/99	011299W1	1	
Chromium	<.01	200.7	01/12/99	01/14/99	011299W1	1	
Cobalt	<.01	200.7	01/12/99	01/14/99	011299W1	1	
Copper	<.01	200.7	01/19/99	01/20/99	011999W1	1	
Iron	<.05	200.7	01/12/99	01/14/99	011299W1	1	
Lead	<.005	200.7	01/12/99	01/14/99	011299W1	1	
Mercury	<.0002	245.1	01/08/99	01/08/99	010899W1	1	
Nickel	<.05	200.7	01/12/99	01/14/99	011299W1	1	
Silver	<.01	200.7	01/12/99	01/14/99	011299W1	1	
Vanadium	<.03	200.7	01/12/99	01/14/99	011299W1	1	
Zinc	.02	200.7	01/19/99	01/20/99	011999W1	1	

Notes:

J-Estimated value

Authorized: Monika Santucci
Date: January 20,1999 Monika Santucci

5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

O'Brien & Gere Laboratories, Inc.

Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.
Project: Accurate Die Casting - Fayetteville, NY
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517
Certification NY No.: 10155

Sample: K3390
Samp. Description: WTP Effluent - (LAB FILTER)
Units: mg/L

Collected: 01/06/99
Received: 01/06/99

Matrix: Water
%Solids:
Number of analytes: 1

Parameter	Result	Method	Prepared	Analyzed	QC Batch	Dilut.	Note
Aluminum, filtered	<.1	200.7	01/12/99	01/14/99	011299W1	1	

Notes:

J-Estimated value

Authorized: Monika Santucci
Date: January 16, 1999 Monika Santucci

O'Brien & Gere Laboratories, Inc.

Analytical Results
Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.
Project: Accurate Die Casting - Fayetteville, NY
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517
Certification NY No.: 10155

Sample: K3389
Samp. Description: WTP Effluent - Composite

Collected: 01/06/99 12:32
Received: 01/06/99 15:40

Matrix: Water

Parameter	Result	Units	Method	Prepared	Analyzed	QC Batch	Note
CBOD5	<5.	mg/L	EPA 405.1		01/08/99	010899W11	
Total Kjeldahl nitrogen	<.4	mg/L	EPA 351.2	01/14/99	01/20/99	011499W21	
Total dissolved solids	1100.	mg/L	EPA 160.1		01/13/99	011399W15	
Total suspended solids	<5.	mg/L	EPA 160.2		01/11/99	011199W12	

Notes:

J-Estimated value

Authorized: Monika Santucci
Date: January 21, 1999 Monika Santucci

5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

O'Brien & Gere Laboratories, Inc.

5000 Brittonfield Parkway
East Syracuse, New York 13057
(315) 437-0200

384

Chain of Custody

Client: O'BRIEN & GERE TECHNICAL SERVICES INC

Project: ITT FINANCIAL (FORMER ACCURATE DIE)

Sampled by: JERRY BORN

Client Contact: TIM EDDY / JERRY BORN Phone # 2467 6370109

Sample Description

Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers	Analysis/Method: EPA METH 8021 VOCs	VOCs EPA METH 826	METALS	ALUMINUM FILTERED	TKN	CBODS	TSS/TDS	Comments
WTP INFLUENT	1/6/99	8:04 AM	WATER	GRAB	2	X							
WTP BETWEEN GACS	1/6/99	8:07 AM	WATER	GRAB	2	X							
WTP EFFLUENT	1/6/99	8:10 AM	WATER	GRAB	2		X						
WTP EFFLUENT	1/6/99	12:25 PM	WATER	COMP	1			X					
WTP EFFLUENT	1/6/99	12:30 PM	WATER	COMP	1				X				
WTP EFFLUENT	1/6/99	12:27 PM	WATER	COMP	1					X			
WTP EFFLUENT	1/6/99	12:32 PM	WATER	COMP	1						X		
WTP EFFLUENT	1/6/99	12:35 PM	WATER	COMP	1							X	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by: [signature]	Date: 1/6/99	Time: 1540	Received by Lab: Mark F. Jackson	Date: 1/6/99	Time: 15:40
Shipment Method: HAND DELIVERED			Airbill Number:		

Turnaround Time Required:
Routine X
Rush (Specify)

Comments:

Cooler Temperature: 2°C

Original-Laboratory Copy-Client

O'Brien & Gere Laboratories, Inc.

Analytical Results Method: 8260

Client: O'Brien & Gere Engineers, Inc.
Project: Accurate Die Casting - Fayetteville, NY
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517
Certification NY No.: 10155

Sample: K4494
Samp. Description: WTP Effluent (Grab)
Instrument: HP5973 GCMS#3
Units: ug/L
Number of analytes: 13

Collected: 01/20/99
Received: 01/20/99
Prepared: 01/22/99

Matrix: Water
QC Batch: 012299W1
%Solids:
Purge volume: 25 mL

Parameter	Result	Surrog Limits	Dilution	Analyzed	Notes
Acetone	<10.		1	01/22/99	
Methylene chloride	<2.0		1	01/22/99	
trans-1,2-Dichloroethene	<.50		1	01/22/99	
cis-1,2-Dichloroethene	<.50		1	01/22/99	
Trichloroethene	<.50		1	01/22/99	
4-Methyl-2-pentanone	<5.0		1	01/22/99	
Toluene	<.50		1	01/22/99	
2-Hexanone	<5.0		1	01/22/99	
Tetrachloroethene	<.50		1	01/22/99	
1,1,2,2-Tetrachloroethane	<.50		1	01/22/99	
Dibromofluoromethane (surrogate)	99.%	61-136	1	01/22/99	
Toluene-d8 (surrogate)	94.%	84-114	1	01/22/99	
Bromofluorobenzene (surrogate)	90.%	77-117	1	01/22/99	

Notes:

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: January 26, 1999 Monika Santucci

5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

O'Brien & Gere Laboratories, Inc.

Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.
Project: Accurate Die Casting - Fayetteville, NY
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517
Certification NY No.: 10155

Sample: K4495
Samp. Description: WTP Effluent (Composite)
Units: mg/L

Collected: 01/20/99
Received: 01/20/99

Matrix: Water
%Solids:
Number of analytes: 2

Parameter	Result	Method	Prepared	Analyzed	QC Batch	Dilut.	Note
Mercury	<.0002	245.1	01/25/99	01/26/99	012599W1	1	
Zinc	<.01	200.7	01/21/99	01/22/99	012199W1	1	

Notes:

J-Estimated value

Authorized: Monika Santucci
Date: January 27, 1999 Monika Santucci

5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

O'Brien & Gere Laboratories, Inc.

Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.
Project: Accurate Die Casting - Fayetteville, NY
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517
Certification NY No.: 10155

Sample: K4495
Samp. Description: WTP Effluent (Composite)

Collected: 01/20/99
Received: 01/20/99 15:35

Matrix: Water

Parameter	Result	Units	Method	Prepared	Analyzed	QC Batch	Note
Total dissolved solids	680.	mg/L	EPA 160.1		01/20/99	012099W12	
Total suspended solids	<5.	mg/L	EPA 160.2		01/21/99	012199W11	

Notes:

J-Estimated value

Authorized: Monika Santucci
Date: January 23,1999 Monika Santucci

5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

O'Brien & Gere Laboratories, Inc.

5000 Brittonfield Parkway
East Syracuse, New York 13057
(315) 437-0200

Chain of Custody

527

Client: O'BRIEN & GERE TECH SERV. INC.
Project: ITT FINANCIAL (FORMER ACCURATE DIE)
Sampled by: JERRY BORN
Client Contact: TIM EDDY/ JERRY BORN Phone # 2467 637 0109

Sample Description / Analysis/Method

Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers	VOCs EPA METHOD 8260	TSS/TDS	Zn + Hg					Comments
WTP EFFLUENT	1/20/99	8:05 am	WATER	GRAB	2	X							
WTP EFFLUENT	1/20/99	1:05 pm	WATER	COMP	1		X						
WTP EFFLUENT	1/20/99	1:07 pm	WATER	COMP	1			X					

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by: [signature]	Date: 1/20/99	Time: 1535	Received by Lab: [signature]	Date: 1/20/99	Time: 15:35
Shipment Method: HAND DELIVERED			Airbill Number:		

Turnaround Time Required:
Routine X
Rush (Specify)

Comments:

Cooler Temperature: 2°C

Original-Laboratory Copy-Client

O'Brien & Gere Laboratories,Inc.

Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.
Project: Accurate Die Casting - Fayetteville, NY
Proj. Desc: Weekly Effluent Sampling

Job No.: 3435.021.517
Certification NY No.: 10155

Sample: K4907
Samp. Description: WTP Effluent

Collected: 01/27/99
Received: 01/27/99 15:30

Matrix: Water

Parameter	Result	Units	Method	Prepared	Analyzed	QC Batch	Note
Total dissolved solids	560.	mg/L	EPA 160.1		02/01/99	020199W13	
Total suspended solids	<5.	mg/L	EPA 160.2		01/28/99	012899W11	

Notes:

J-Estimated value

Authorized: Monika Santucci
Date: February 3,1999 Monika Santucci

595

O'Brien & Gere Laboratories, Inc.

5000 Brittonfield Parkway
East Syracuse, New York 13057
(315) 437-0200

Chain of Custody

Client: O'BRIEN & GERE TECHNICAL SERV. INC

Project: ITT FINANCIAL (FORMER ACCURATE DIE)

Sampled by: JERRY BORN

Client Contact: JERRY BORN, TIM EDDY Phone # 697 0109, 2467

Sample Description

Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers	Analysis/Method: TSS/TDS	Comments
WTP EFFLUENT	1/27/99	10:50 AM	WATER	COMP	1	X	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by: JERRY BORN	Date: 1/27/99	Time: 1530	Received by Lab: Mark F. Jackson	Date: 1/27/99	Time: 15:30
Shipment Method: HAND DELIVERED			Airbill Number:		

Turnaround Time Required:
Routine X
Rush (Specify)

Comments:

Cooler Temperature: 3°C

Original-Laboratory Copy-Client

PM's Review Copy

O'BRIEN & GERE
ENGINEERS, INC.

February 25, 1999

Mr. David Crosby, P.E.
Bureau of Construction Services
Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-7010

Re: Annual Report
Former Accurate Die Casting Site
Fayetteville, New York

File: 2488.731 #5

Dear Mr. Crosby:

This letter presents the Annual Report for the ground water recovery and treatment system (System) at the former Accurate Die Casting site located at 547 East Genesee Street in the Village of Fayetteville, New York (Figure 1). The System was constructed in 1995 to recover and treat overburden and shallow bedrock ground water exhibiting volatile organic compounds (VOCs) in accordance with the Consent Order between the New York State Department of Environmental Conservation (NYSDEC) and ITT Commercial Finance Corporation dated August 19, 1991, as amended June 6, 1994. The System has been operating since February 5, 1996.

The purpose of this report is to present a summary and evaluation of the data collected between December 1, 1997 and December 1, 1998. These data include monitoring and recovery well data as well as System performance information generated in accordance with the NYSDEC-approved Sampling and Analysis Plan (SAP) dated March 1996 and the State Pollutant Discharge Elimination System (SPDES) Permit #734052.

This report is divided into six sections as follows:

1. Project background
2. System performance
3. Ground water monitoring
4. Ground water quality assessment
5. Conclusions
6. Recommendations

O'Brien & Gere Engineers, Inc., an O'Brien & Gere company
5000 Brittonfield Parkway / P.O. Box 4873, Syracuse, New York 13221-4873
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... and offices in major U.S. cities

1. PROJECT BACKGROUND

Presented below is background information regarding the remedial investigation (RI) for the site, remediation activities completed to date, and information regarding the ground water recovery and treatment system.

Remediation investigation:

As a result of the RI and additional studies conducted for the former Accurate Die Casting site, the NYSDEC identified five areas which could pose an unacceptable risk to human health if not remediated. The five areas identified in the December 1994 Record of Decision (ROD) are as follows:

Area 1 - An area of soils containing polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), and VOCs. This area is also referred to as the PCB/PAH/VOC Soils Area and its location is shown on Figure 2.] ← ~~not correct~~

Area 2 - An area where soils contained trichloroethylene (TCE) located outside the northeast corner of the former Accurate Die Casting facility as shown on Figure 2.

Area 3 - Overburden ground water containing TCE above NYSDEC ground water quality standards.

Area 4 - Shallow bedrock ground water containing TCE above NYSDEC ground water quality standards.

Area 5 - An abandoned septic tank, located as shown on Figure 2, containing sludge exhibiting concentrations of zinc above NYSDEC standards.

Remediation activities completed:

Area 1 - Unsaturated soils exhibiting concentrations of PAHs, PCBs and VOCs above remedial action objectives (RAOs) in the northwest area of the site were excavated during September and October 1995. After excavating approximately 600 cy of soil, grab samples were collected from the excavations and analyzed for PAHs, VOCs and PCBs to evaluate if further action was required. Based on the results of the sampling and analyses, it was concluded that the unsaturated soils containing PAHs, PCBs and VOCs above the RAOs had been removed to the extent practicable.

In 1997, approximately 350 cy of the 600 cy of excavated soil was removed from the site and transported to the ESMI facility in Fort Edward, New York for low temperature thermal destruction and subsequent off-site disposal. The remaining 250 cy of soil was mechanically processed on-site to enhance volatilization of VOCs in accordance with the ROD amendment issued in October 1997.

In April 1998, following analyses that indicated that the RAOs had been achieved, the 250 cy of mechanically processed soils were spread on-site in the Corrective Action Management Unit (CAMU) identified in the ROD amendment. In accordance with the NYSDEC requirements, approximately 1 foot of general fill, topsoil, and grass seed was placed on top of the processed soils.

Pursuant to ESD Notice, in August 1998 construction plans for the installation of a ground water collection trench to collect ground water containing VOCs in Area 1 were submitted to the NYSDEC for review. The proposed location of the collection trench is shown on Figure 2. Pursuant to an Explanation of Significant Differences (ESD) notice dated October 1998, the plans were approved with modifications. Completion of construction activities will occur in 1999. Collected ground water will be treated at the existing on-site treatment system.

Area 2 - The area outside the northeast corner of the facility was addressed as part of an Interim Remedial Measure (IRM) between May 24 and June 22, 1994. During that period, soils exhibiting TCE above the RAO of 0.7 mg/kg were removed, to the extent practicable. Afterwards, the soil was mechanically processed on-site to enhance volatilization of the VOCs until residual levels were documented to be below the RAOs. Following achievement of the RAOs, the soils were used to backfill the excavation. A description of the soil remediation activities completed in this area is provided in the NYSDEC-approved Soil Remediation Activities Summary Report dated October 1994.

Area 3 - As part of the IRM which addressed the soils outside the northeast corner of the facility, a ground water collection sump was constructed within the excavation (Figure 2). The sump extends to the clay layer which was found to be present at the base of the excavation made during the soil remediation activities. This sump is being utilized as one of the ground water recovery points for the ground water recovery and treatment system constructed at the Site to address the shallow/overburden ground water.

Also, an overburden recovery well designated as RW-1 (Figure 2) was constructed on-site as part of the IRM. A 24-hour aquifer performance test was conducted using this recovery well on September 28 and 29, 1994 to evaluate the overburden aquifer characteristics and to assess the influence of pumping on the overburden aquifer. The results of the performance test are provided in the NYSDEC-approved Basis of Design Report for the System dated December 1994. This recovery well is being utilized to collect ground water containing TCE in the overburden aquifer downgradient of the northeast corner of the facility.

Recovery and treatment of overburden ground water using the sump and RW-1 has been ongoing since February 5, 1996 and is continuing.

Area 4 - A second ground water recovery well, designated as RW-2, is being utilized on-site to recover ground water containing VOCs from the shallow bedrock in the vicinity of the northeast corner of the facility (Figure 2). This well was installed between September 5 and 18, 1995, in accordance with the NYSDEC-approved Remedial Design/Remedial Action (RD/RA) Work

Plan dated March 1995 and the letter from O'Brien & Gere dated May 26, 1995, as amended on July 17, 1995. An aquifer performance test was conducted using this recovery well between November 7 and 13, 1995. The results of the performance test were provided to the NYSDEC in a letter report dated January 12, 1996.

Recovery and treatment of shallow bedrock ground water using RW-2 was initiated on February 5, 1996 and is continuing.

Area 5 - During 1995, the septic tank was uncovered and the contents were removed and disposed of at an off-site NYSDEC-approved landfill. Once the contents were removed, the walls of the septic tank were cleaned using a pressure-washer. The spent washing liquid was collected and treated on-site using the ground water treatment system. Subsequent to decontaminating the floor and walls of the septic tank, the concrete vault was filled and buried, completing remediation of this area.

Ground water recovery and treatment system:

The ground water recovery and treatment system is currently recovering ground water from the sump, RW-1, and RW-2. Upon completion, water collected by the ground water collection trench will also be treated at the on-site treatment system. Ground water collection and treatment will continue until VOC levels in the ground water are below NYSDEC ground water quality standards, or until such a time that asymptotic levels have been achieved and further reduction in VOC levels in ground water is not practicable.

The ground water recovered from the sump and the two recovery wells is being treated through two 1,500 lb granular activated carbon (GAC) vessels, connected in series, in accordance with the Basis of Design Report dated December 1994. Prior to being pumped through the GAC filters, the ground water from each of the individual recovery wells is combined in a 2,000 gallon flow equalization tank and pumped through two 10-micron bag filters connected in parallel.

A flow meter for each recovery well is provided on the influent lines to the equalization tank. The tank is also equipped to be used as an aeration tank to pretreat the recovered ground water for VOCs prior to GAC filtration, if necessary.

Following treatment by the GAC, the treated ground water is discharged to the bank of Bishop Brook, as shown on Figure 2, to increase dissolved oxygen levels of the effluent prior to entering the brook. Discharge of treated ground water to Bishop Brook is monitored for compliance with the conditions of the SPDES Permit as discussed in the Operation and Maintenance (O&M) Manual dated August 1996.

2. SYSTEM PERFORMANCE

Operation of the ground water recovery and treatment system was initiated on February 5, 1996. The System has run continuously since start-up with the exception of brief periods when maintenance activities were performed. Between December 1, 1997 and December 1, 1998, a total of 6,856,820 gallons of ground water were

recovered and treated. A summary of the quantity of water pumped each month and the percentage of the total flow contribution from each recovery well and the sump is presented in the following table:

Month	RW-1		RW-2		Sump		Total Gallons
December 1997	357,600	80%	91,530	20%	100	<1%	449,230
January 1998	404,000	70%	161,680	28%	10,070	2%	574,750
February 1998	402,280	67%	193,830	32%	1,970	<1%	598,080
March 1998	459,890	66%	231,590	33%	5,130	1%	696,610
April 1998	437,440	66%	224,560	34%	150	<1%	662,150
May 1998	410,630	67%	203,400	33%	720	<1%	614,750
June 1998	347,060	65%	182,710	34%	2,650	<1%	532,420
July 1998	377,460	63%	215,240	36%	3,350	1%	596,050
August 1998	363,980	63%	212,450	37%	3,230	1%	579,660
September 1998	343,380	64%	190,140	35%	2,850	1%	536,370
October 1998	332,860	69%	146,430	30%	1,090	<1%	480,380
November 1998	343,380	64%	190,140	35%	2,850	1%	536,370
Total	4,578,960	67%	2,243,700	33%	34,160	<1%	6,856,820
	8.71		4.27		0.065		gpm

Source: O'Brien & Gere Technical Services

A graph depicting the total monthly volumes recovered and treated since startup is presented in Attachment 1. As indicated from the graph, the monthly volumes have been decreasing since the 3rd quarter1997. The decrease may be attributed to the decrease in the efficiency of the recovery well RW-1 which is discussed further under *Ground Water Elevation Assessment* in Section 3 of this report.

Treatment system performance monitoring:

System monitoring has been performed in accordance with the SPDES Fact Sheet (#734052) permit as last modified by the NYSDEC on November 13, 1997, and the SAP as modified by a letter to the NYSDEC dated April 1, 1997. In addition to the SPDES monitoring requirements for the System effluent, the ground water monitoring program includes a monthly System influent sample for VOCs analysis to enable an evaluation of the VOC loading of the GAC. A sample is also collected between the lead and lag GAC vessels (intermediate sample) monthly for VOCs analysis to enable an evaluation of breakthrough through the lead GAC vessel. The monthly System influent and intermediate samples are analyzed for VOCs using EPA Method 8010/8020, and the effluent samples are analyzed for VOCs using EPA Method 8260. The current monitoring requirements of the SPDES permit, including the discharge limitation daily average, the discharge limitation daily maximum, the minimum measurement frequency, and the sample type for each analyte, are presented on Table 1 along with the results of analyses. Based on the treatment system effluent monitoring data, the System is treating recovered ground water in accordance with the ROD.

To date, TCE has been the only compound detected in the influent. A graph showing monthly influent TCE concentrations is included in Attachment 2. As indicated on the graph, influent TCE concentrations have generally decreased since the commencement of recovery operations. Based on the total monthly gallons recovered and monthly influent TCE concentrations, approximately 243 lbs of TCE has been removed from ground water since the commencement of ground water treatment system operations.

Treatment system maintenance activities:

The treatment system maintenance activities have included the periodic replacement of spent GAC and the replacement of bag filters. Spent carbon was shipped as hazardous waste to Calgon Corp. in Catlesburg, KY for reactivation.

A summary of maintenance activities for the reporting period is provided below.

- January 6, 1998 — Changed west bag filter.
- February 3, 1998 — Changed east bag filter.
- March 2, 1998 — Replaced carbon in GAC #1 and adjusted valve positions to put GAC #2 in the lead position.
- May 15, 1998 — Changed west bag filter. More silt accumulation observed.
- May 26, 1998 — Replaced blown fuse in RW-2 power supply.
- June 2, 1998 — Replaced carbon in GAC #2 and adjusted valve positions to put GAC #1 in the lead position.
- August 17, 1998 — Changed west bag filter.
- November 9, 1998 — Replaced carbon in GAC #1 and adjusted valve positions to put GAC #2 in the lead position. Replaced the east bag filter.

3. GROUND WATER MONITORING

Ground water quality monitoring was completed in April and October 1998. The purpose of the ground water monitoring program is to:

- evaluate the zone of capture for the overburden (RW-1) and bedrock (RW-2) recovery wells
- assess the volatile organic compound (VOC) concentrations within the overburden and bedrock ground water, and assess when the criteria for discontinuing pumping have been met
- monitor and assess ground water quality in the PCB/PAH/VOC Soils Area

On November 5, 1998, at the request of the NYSDEC, ITT Industries installed a shallow ground water monitoring well (MW-24) downgradient of existing well MW-21 and the proposed ground water collection trench location in the vicinity of the PCB/PAH/VOC Soils Area. The locations of MW-24 as well as the proposed ground water collection trench are shown on Figure 2.

Ground Water Elevation Assessment

Ground water elevation monitoring was performed during each semi-annual sampling event in April and October 1998 to assess the extent of influence attributable to pumping the overburden (RW-1) and shallow bedrock (RW-2) ground water recovery wells, as well as seasonal influences. The well construction details and ground water elevations measured through October 1998 are summarized in Table 2. Overburden and bedrock ground water elevations and drawdown measured since startup through October 1998 are illustrated on graphs included in Attachment 2.

Seasonal elevation fluctuations depicted on the ground water elevation graphs are consistent with previous data. Review of the bedrock drawdown graphs (Attachment 2) indicated that the drawdown in the bedrock aquifer is consistent with previous results.

Review of the overburden drawdown graphs (Attachment 2) shows an increasing difference in drawdown between recovery well RW-1 and the overburden aquifer monitoring wells. The increasing difference indicates that the recovery well may be becoming less efficient. The apparent reduced recovery well efficiency would result in a reduced area of drawdown, and subsequently a reduced capture zone within the overburden aquifer. The reduced recovery well efficiency may likely be due to clogging and/or encrustation in the recovery well screen. The recovery well efficiency should be restored through physical and potentially chemical redevelopment techniques to reduce encrustation in the recovery well screen.

A capture zone assessment based on ground water elevation contours for October 1998 (Figure 3) was not attempted due to the apparent inefficiency of recovery well RW-1. As indicated in the first Annual Report dated February 5, 1997, it was estimated that the extent of ground water capture around RW-1 in the overburden aquifer ranges between a distance of 100 ft under low ground water elevation conditions, and 150 ft under high conditions.

Overburden ground water elevation data in the PAH/VOC/PCB Soils Area was not included in the ground water contour because the wells in this area screen a shallow aquifer unit that is hydrogeologically distinct from the unit screened by the remaining site overburden monitoring wells. However, shallow ground water flow direction in the PAH/VOC/PCB Soils Area is north, towards Bishop Brook, based on the ground water elevations in this vicinity.

Ground Water Quality Assessment

Ground water samples were collected in accordance with the NYSDEC-approved SAP dated March 1996 and analyzed for VOCs to evaluate ground water quality. Table 3 presents a summary of TCE concentrations and

Table 4 presents a summary of other VOCs detected in the ground water. Graphs depicting TCE concentration trends are included in Attachment 3.

The following observations are based on the data:

- The TCE concentrations in site ground water exhibit seasonal variations with higher TCE concentrations observed during the months with low ground water elevation (July and October), and lower TCE concentrations observed during the months with higher ground water elevation (January and April).

- TCE concentrations in well MW-9 exhibit a higher seasonal variation since the commencement of ground water recovery. TCE concentrations in well MW-14 exhibit an overall uptrend since the commencement of ground water quality monitoring. TCE concentrations in MW-12 exhibit a decrease. Concentrations in MW-5 and MW-13 have remained consistent with previous data.

- TCE concentrations in MW-6, PZ-1, and PZ-2 have decreased since the commencement of ground water recovery operations which demonstrates that recovery well RW-1 is reducing downgradient migration.

- TCE concentrations in the PAH/VOC/PCB Soils Area are consistent with previous data. Concentrations in MW-22 have increased since monitoring has commenced, but appear to have stabilized. Constituents detected in well MW-24 included cis, 1,2-Dichloroethylene at 2,600 ppb and trichloroethylene at 6,000 ppb. It is expected that the concentrations in MW-24 will decrease subsequent to the installation of the ground water collection trench.

- TCE concentrations in the bedrock aquifer have stabilized since 1997.

5. CONCLUSIONS

Below is a summary of observations based on the data presented herein.

1. An additional 6,856,820 gallons of combined overburden and bedrock ground water has been recovered and treated between December 1, 1997 and December 1, 1998. The monthly ground water recovery volumes have been decreasing since the 3rd quarter1997. The decrease may be attributed to a decrease in the efficiency of the recovery well.

2. Based on the treatment system effluent monitoring data, the GAC vessels are treating recovered ground water in accordance with the ROD.

3. The extent of ground water capture in the overburden aquifer is likely reduced due to the reduced efficiency of recovery well RW-1.

4. Ground water quality data trends continue to suggest seasonal variations with higher TCE concentrations typically noted in the months with low ground water elevation (July and October) and lower TCE concentrations in months with higher ground water elevation (January and April).

6. RECOMMENDATIONS

Following are recommendations based on the results of monitoring performed between December 1997 and December 1, 1998.

1. Ground water quality monitoring should continue to be performed on an annual basis in accordance with the SAP for all the existing monitoring wells on site during October. On a semi-annual basis, during the month of April, ground water samples should continue to be collected from monitoring wells MW-6, MW-9, MW-10, MW-11, MW-14, MW-17, MW-18, MW-19, MW-21, MW-22, MW-24, and the sump in accordance with the May 21, 1997 letter to the NYSDEC and the protocol presented in the SAP.

2. Recovery well RW-1 should be redeveloped to reduce encrustation in the recovery well screen and increase well efficiency.

If you have any questions regarding the information presented herein, please do not hesitate to call Al Farrell or me.

How will this be done / when?

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

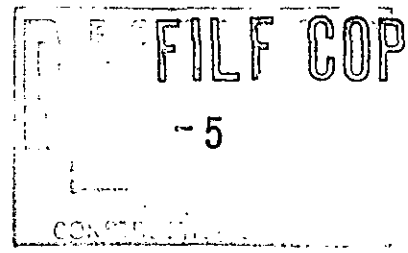
James R. Heckathorne, P.E.
Vice President

I:\DIV71\PROJECTS\2488731\5_RPTS\98ANNRPT.WPD

cc: V. Nattanmai, P.E. - NYSDEC
A. English - NYSDEC (3 copies)
T. Male - NYSDEC
C. Cavenough, P.E. - NYSDEC, Syracuse
Central Field Unit: Project Attorney Accurate Die Site - NYSDEC
Director, Bureau of Environmental Exposure Investigation - NYSDOH (2 copies)
H. Hamel - NYSDOH
C. Johnson, Esq. - ITT Corporation
C. Salcines - ITT Corporation
R. Alessi, Esq. - LeBoeuf, Lamb, Greene & MacRae
M. Peters, Esq. - LeBoeuf, Lamb, Greene & MacRae
T. Brown, P.E. - O'Brien & Gere Technical Services, Inc.
A. Farrell, P.E. - O'Brien & Gere Engineers, Inc.

FILE

O'BRIEN & GERE
TECHNICAL SERVICES



Transmittal

To: Mr. David Crosby, PE
Bureau of Construction Services
Division of Hazardous Waste Remediation
NYSDEC
50 Wolf Road
Albany, NY 12233-7010

Date: April 2, 1999

File: I5051

Re: ITT Accurate Die Cast
Fayetteville, NY

We are sending you:

_x_herewith_under separate cover: _x_drawings_descriptive literature_x_letters

If material received is not as listed, please notify us at once.

Quan.	Identifying Number	Title	Action*
1	Sketch	Erosion Control & Construction Water Management Plan	I
1	Letter	" " " " " "	I

*Action letter code: **R**-reviewed **N**-reviewed and noted **I**-for your information **S**-resubmit **J**-rejected **Y**-for your approval

Remarks: Three copies each of the above will be mailed to : Henriette Hamel, R.S. in Syracuse
One copy each of the above will be mailed to : John Mae in Syracuse
Per our telephone conversation this date, the HASP will be mailed out week of Apri 112, 1999

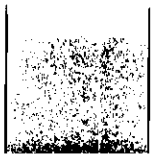
cc: TEddy, OBG Engr
AFarrell, OBG Engr
file

Very truly yours,

O'BRIEN & GERE TECHNICAL SERVICES, INC.

John P. Terwilliger

John P. Terwilliger
Project Manager



O'Brien & Gere Technical Services, Inc., an O'Brien & Gere company
5000 Brittonfield Parkway / P.O. Box 5240 / Syracuse, NY 13220
(315) 437-6400 / FAX (315) 437-9800 • http:// www.obg.com
... and offices in major U.S. cities

The work of this project is in an area of short, fairly steep slopes. As such, it is necessary to install erosion control that will inhibit migration of soil particles from the work site. The Contract Drawings indicate two methods of erosion control. Both erosion control fabric fencing and/or staked hay bales are detailed.

Please refer to the attached sketch indicating approximate location of the Erosion Control Fabric Fencing and the Construction Water Collection/Settling Tank.

It is planned that the filter fabric fencing will be installed on the north side of the ground water collection trench, placed sufficiently far enough away from the actual area as to easily maintain its integrity. Although large water flows are not anticipated, if necessary, staked baled hay will be installed in accordance with Drawing details. The fabric will extend approximately from a point mid-way between geoprobe points GP-1 and GP-6, northwesterly to a point North and West of soil boring point B-1.

The fabric fencing will remain in place until a stand of grasses are established and as required by the Contract Specifications.

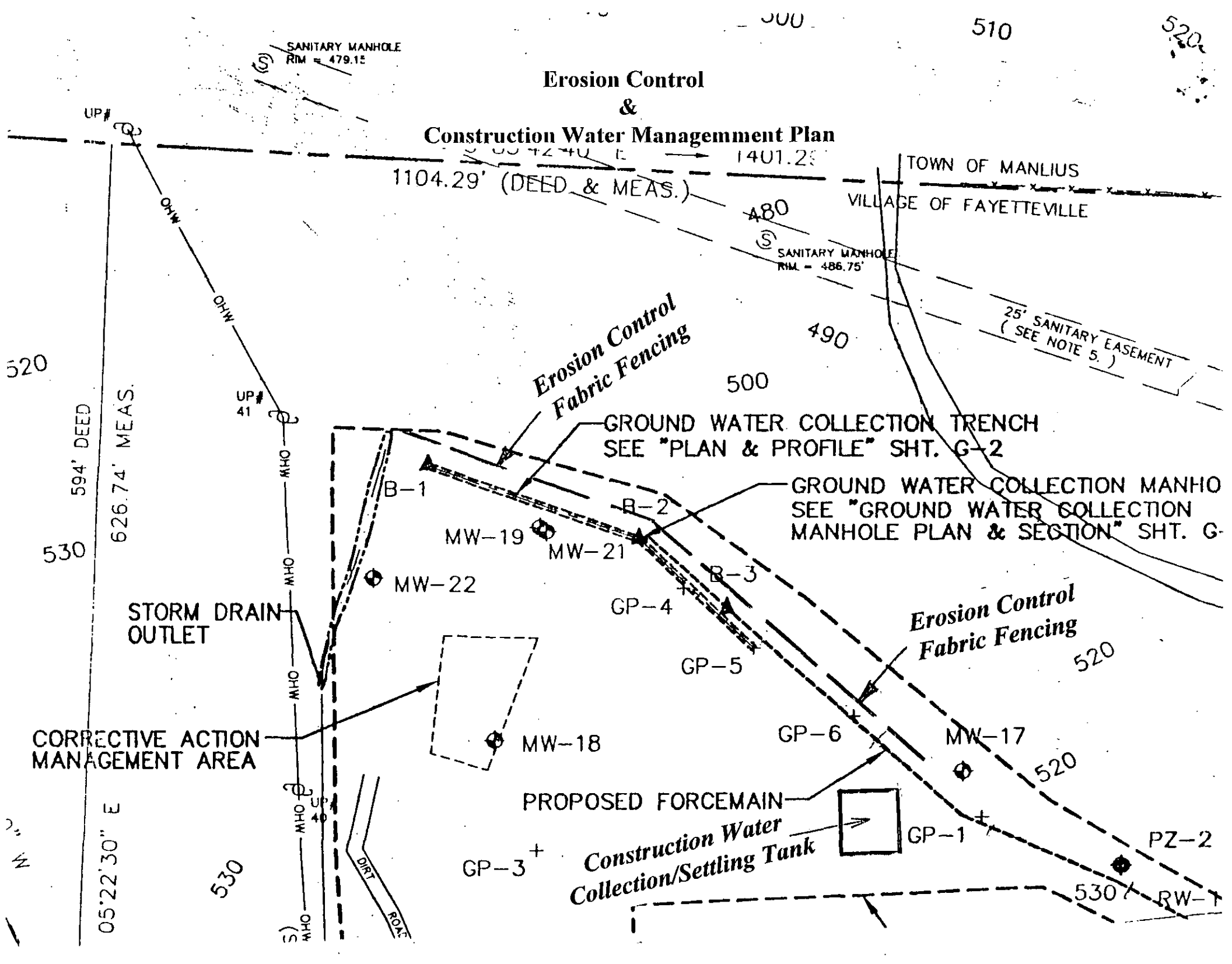
Waters encountered as a result of rain runoff entering the work/trench area, as well as ground water encountered during the trenching phase of the project, will be collected, settled and treated.
It is planned to install manhole (MH-21) as the first item of trenching. A temporary trash pump will be installed in the manhole and the discharge piping routed to a 50,000 gallon above ground, modular settling tank. This tank will have been previously installed as part of the effort to redevelop wells presently used for the ongoing site remediation activities.

At this time, the groundwater collection piping installation is planned to begin at MH-21 and proceed in a south easterly direction. As the perforated pipe is laid, ground water encountered during excavation will flow into the manhole then be pumped to the settling tank. The settling tank is sized to permit sufficient retention time for particle settlement.

At a point farthest from the influent end of the tank, a small pump will be installed, along with discharge piping, to pump and convey settled water to the existing treatment plant where a bag filter will remove remaining sediment and carbon filters will remove entrained VOCs.

At completion of the trenching phase of the project when construction water is no longer generated, all the settled water will have been pumped and treated leaving sediment in the modular collection tank. This sediment will be sampled and tested in a laboratory for parameters dictated by the Engineer. Depending upon the test results, sediments will either be disposed on site or transported and disposed as either hazardous or non-hazardous materials.

After all the sediment is removed from the tank, it will be power washed and the wash waters treated in the existing treatment plant. If required, wipe samples will be taken on the tank liner surface to determine if any contaminants remain.


Erosion Control
&
Construction Water Managemment Plan
SANITARY MANHOLE
RIM = 479.15
UP#
1104.29' (DEED & MEAS.)
TOWN OF MANLIUS
VILLAGE OF FAYETTEVILLE
SANITARY MANHOLE
RIM = 486.75'
25' SANITARY EASEMENT
(SEE NOTE 5.)
OHW
UP# 41
MHO
594' DEED
626.74' MEAS.
Erosion Control
Fabric Fencing
GROUND WATER COLLECTION TRENCH
SEE "PLAN & PROFILE" SHT. G-2
GROUND WATER COLLECTION MANHO
SEE "GROUND WATER COLLECTION
MANHOLE PLAN & SECTION" SHT. G-
B-1
B-2
B-3
MW-19
MW-21
MW-22
GP-4
GP-5
GP-6
MW-17
MW-18
STORM DRAIN
OUTLET
CORRECTIVE ACTION
MANAGEMENT AREA
PROPOSED FORCEMAIN
Construction Water
Collection/Settling Tank
GP-1
GP-3
PZ-2
RW-1
UP# 40
DIRT ROAD
05°22'30" E
480
490
500
510
520
530

TELEFAX

O'BRIEN & GERE ENGINEERS, INC. *Direct Line Fax No. (315) 463-7554*

CONFIDENTIALITY NOTICE

Job Number: 2488.731

Number of Pages: 2 (including cover sheet) Date: April 7, 1999

If pages are missing or illegible, please contact telefax operator

TO: **Dave Crosby**

COMPANY: **NYSDEC**

FAX NO: **518-457-7743**

FROM: **Tim Eddy**

ORIGINAL —

____ *will follow via regular mail* ____ *will follow via overnight delivery* __x__ *will not follow*

MESSAGE:

Attached is the scope of work for RW-1 redevelopment at the Accurate Die Casting facility in Fayetteville, NY. Please call me at 315-437-6100 with questions or comments.

Thank you

Tim Eddy

Overburden Recovery Well RW-1 Redevelopment Scope of Work
Former Accurate Die Casting Site
Fayetteville, NY

SCOPE OF WORK

1. mobilize the appropriate labor, materials, and equipment necessary to inspect and redevelop a 12-inch diameter extraction well installed to a depth of 54 ft.

2. Run a one-hour pumping test to establish the existing well efficiency. Remove the submersible pump and delivery pipe assembly from the well and inspect for wear or defects.

3. Deliver the pump to a qualified pump service facility for inspection and repair, as necessary.

4. Redevelop the well using mechanical surge and air-lifting pumping techniques for 3 days. Surging shall be conducted in both the lower 10 ft screen and upper 5 ft screen. Sufficient pumping capacity shall used so that a flow rate of 25 gpm can be attained. Development water shall be discharged to a temporary storage tank provided by O'Brien & Gere Technical Services to allow sediment to settle. Subsequent to settling, the water will be pumped through the on-site treatment system on a daily basis.

5. Complete a 8 to 12 hour chemical treatment using either glycolic or muratic acid. The acidified well water will be neutralized in a batch tank prior to discharged to the temporary storage tank.

6. Complete a one-hour pumping test to establish the redeveloped well efficiency. Reinstall the submersible pump and delivery pipe assembly into the well.

O'BRIEN & GERE
TECHNICAL SERVICES

Transmittal

To: Mr. David Crosby, PE
Bureau of Construction Services
Division of Hazardous Waste Remediation
NYSDEC
50 Wolf Rd.
Albany, NY 12233-7010

Date: April 8, 1999

File: I5051

Re: ITT - the former Accurate Die Cast

We are sending you:

_X_herewith_under separate cover: _drawings_X_descriptive literature_letters

If material received is not as listed, please notify us at once.

Quan.	Identifying Number	Title	Action*
3		Health and Safety Plans	I

*Action letter code: R-reviewed N-reviewed and noted I-for your information
S-resubmit J-rejected Y-for your approval

Remarks:

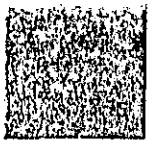
cc: Henriette Hamal - NYSDOH (3 copies)
John Mae - NYSDEC (1 copy)
T Eddy - O'Brien & Gere (1 copy)
A Farrell - O'Brien & Gere

Very truly yours,

O'BRIEN & GERE TECHNICAL SERVICES, INC.

John Terwilliger

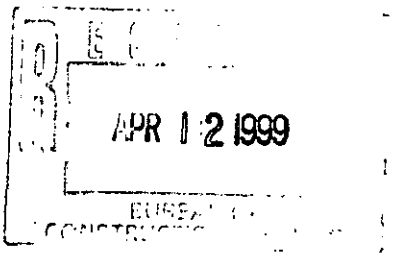
John P. Terwilliger
Project Manager



FILE

O'BRIEN & GERE
ENGINEERS, INC.

FILE COPY



April 8, 1999

Mr. David Crosby, P.E.
Bureau of Construction Services
Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-7010

Re: Former Accurate Die Casting Site
Fayetteville, NY

File: 2488/23123 #2

Dear Mr. Crosby:

O'Brien & Gere Engineers, Inc. has completed a data review and ground water characterization for the former Accurate Die Casting Site in Fayetteville, N.Y. This effort was completed in response to the NYSDEC concern that polychlorinated biphenyls (PCBs) may be present in ground water in the former PCB/VOC/PAH soils area near the location of the proposed ground water collection trench.

As a result of past remedial activities at the site, the potential source of PCBs to ground water in the former PCB/VOC/PAH soils area has been removed. Review of the surface soil analytical data presented in Table 2 of the Former Accurate Die Casting Site Amended Record of Decision dated October 1997 indicates that PCBs were detected in the area surface soils prior to remediation at low concentrations that ranged between 0.32 mg/kg and 2.6 mg/kg. The soils containing PCBs were removed when the soils were excavated in the area during September 1995 in accordance with the Remedial Design/Remedial Action (RD/RA) Work Plan dated March 1995. The removal of the soils containing PCBs was confirmed through post-excavation sampling activities which indicated that PCBs were no longer detectable in the remaining surface soils (O'Brien & Gere 1995).

To evaluate if the previously remediated soils affected ground water, O'Brien & Gere Engineers collected ground water samples in the vicinity of the proposed ground water collection trench on February 16, 1999. The samples were collected from four monitoring wells (MW-18, MW-21, MW-22, and MW-24) and analyzed at O'Brien & Gere Laboratories, Inc. for PCBs using EPA Method 8082. The analytical results are summarized in the attached Table 1 and analytical data sheets are included as Attachment A. PCBs were not detected in these ground water samples.

Since the potential source of PCBs has been removed as a result of the soil remediation and because PCBs have not been detected in the ground water samples, a requirement to monitor PCBs in the former Accurate Die Casting Site ground water treatment system effluent is not warranted.

O'Brien & Gere Engineers, Inc., an O'Brien & Gere company
5000 Brittonfield Parkway / P.O. Box 4873, Syracuse, New York 13221-4873
(315) 437-6100 / FAX (315) 463-7554 • http:// www.obg.com
. . . and offices in major U.S. cities

If you have any questions or comments, please do not hesitate to call me or Al Farrell at 315-437-6100.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Timothy M. Eddy, HGW
Senior Project Scientist

I:\DIV71\PROJECTS\2488\23123\2_CORRES\DECGWC.WPD
Attachments

Reference: O'Brien & Gere Engineers, Inc. correspondence to Mr. Amarinderjit S. Nagi, P.E., NYSDEC dated November 14, 1995.

cc: V. Nattanmai, P.E. - NYSDEC
A. English - NYSDEC
T. Male - NYSDEC
Central Field Unit: Project Attorney Accurate Die Site - NYSDEC
C. Branagh, P.E. - NYSDEC Region 7
Director, Bureau of Environmental Exposure Investigation - NYSDOH (2 copies)
H. Hamel - NYSDOH
C. Johnson, Esq. - ITT Corporation
C. Salcines - ITT Corporation
R. Alessi, Esq. - LeBoeuf, Lamb, Greene & MacRae
M. Peters, Esq. - LeBoeuf, Lamb, Greene & MacRae
T. Brown, P.E. - O'Brien & Gere Technical Services, Inc.
Al Farrell, P.E.- O'Brien & Gere Engineers, Inc.

O'BRIEN & GERE
ENGINEERS, INC.

Table 1
Acuurate Die Casting Site
Fayetteville, New York
PCB Data

Analyte	MW-18 02/16/99 ug/L	MW-21 02/16/99 ug/L	MW-22 02/16/99 ug/L	MW-24 02/16/99 ug/L
Aroclor 1016	0.066 U	0.066 U	0.065 U	0.065 U
Aroclor 1221	0.066 U	0.066 U	0.065 U	0.065 U
Aroclor 1232	0.066 U	0.066 U	0.065 U	0.065 U
Aroclor 1242	0.066 U	0.066 U	0.065 U	0.065 U
Aroclor 1248	0.066 U	0.066 U	0.065 U	0.065 U
Aroclor 1254	0.066 U	0.066 U	0.065 U	0.065 U
Aroclor 1260	0.066 U	0.066 U	0.065 U	0.065 U

NOTES: U - Not detected.

Date Printed: 04/06/99 09:47:35
DBF File: E:\248873 1\ACCUDIE\0299DATA\0299DATA.DBF
FXP File: E:\248873 1\ACCUDIE\0299DATA\PCB.FXP

File Number: 2488.731

ATTACHMENT A

ANALYTICAL DATA SHEETS

O'Brien & Gere Laboratories,Inc.

Analytical Results Method: 8082

Client: O'Brien & Gere Engineers, Inc.
Project: Accurate Die Casting
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517
Certification NY No.: 10155

Sample: K6061
Samp. Description: MW-18
Primary column: Y
Units: ug/L
Column: DB-608 30m x 0.53mmID
Dilution: 1 Instrument: HP5890-P

Collected: 02/16/99
Received: 02/16/99
Prepared: 02/17/99
Analyzed: 02/19/99

Matrix: Water
QC Batch: 021799W2
%Solids:
Sample Size: .98 L

Number of analytes: 9

Parameter	Result	Col		Surrog Limits	Notes
PCB-1016	<.066	1			
PCB-1221	<.066	1			
PCB-1232	<.066	1			
PCB-1242	<.066	1			
PCB-1248	<.066	1			
PCB-1254	<.066	1			
PCB-1260	<.066	1			
2,4,5,6-Tetrachloro-m-Xylene (surrogate)	82.%	1		56-131	
Decachlorobiphenyl (surrogate)	47.%	1	#	57-126	

Notes:

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: February 22,1999 Monika Santucci

O'Brien & Gere Laboratories,Inc.

Analytical Results Method: 8082

Client: O'Brien & Gere Engineers, Inc.
Project: Accurate Die Casting
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517
Certification NY No.: 10155

Sample: K6062
Samp. Description: MW-21
Primary column: Y
Units: ug/L
Column: DB-608 30m x 0.53mmID
Dilution: 1 Instrument: HP5890-P

Collected: 02/16/99
Received: 02/16/99
Prepared: 02/17/99
Analyzed: 02/19/99

Matrix: Water
QC Batch: 021799W2
%Solids:
Sample Size: .99 L

Number of analytes: 9

Parameter	Result	Col	Surrog Limits	Notes
PCB-1016	<.066	1		
PCB-1221	<.066	1		
PCB-1232	<.066	1		
PCB-1242	<.066	1		
PCB-1248	<.066	1		
PCB-1254	<.066	1		
PCB-1260	<.066	1		
2,4,5,6-Tetrachloro-m-Xylene (surrogate)	82.%	1	56-131	
Decachlorobiphenyl (surrogate)	59.%	1	57-126	

Notes:

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: February 22,1999 Monika Santucci

O'Brien & Gere Laboratories,Inc.

Analytical Results Method: 8082

Client: O'Brien & Gere Engineers, Inc.
Project: Accurate Die Casting
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517
Certification NY No.: 10155

Sample: K6063
Samp. Description: MW-24
Primary column: Y
Units: ug/L
Column: DB-608 30m x 0.53mmID
Dilution: 1 Instrument: HP5890-P

Collected: 02/16/99
Received: 02/16/99
Prepared: 02/17/99
Analyzed: 02/19/99

Matrix: Water
QC Batch: 021799W2
%Solids:
Sample Size: 1 L

Number of analytes: 9

Parameter	Result	Col	Surrog Limits	Notes
PCB-1016	<.065	1		
PCB-1221	<.065	1		
PCB-1232	<.065	1		
PCB-1242	<.065	1		
PCB-1248	<.065	1		
PCB-1254	<.065	1		
PCB-1260	<.065	1		
2,4,5,6-Tetrachloro-m-Xylene (surrogate)	82.%	1	56-131	
Decachlorobiphenyl (surrogate)	68.%	1	57-126	

Notes:

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: February 22,1999 Monika Santucci

O'Brien & Gere Laboratories, Inc.

Analytical Results Method: 8082

Client: O'Brien & Gere Engineers, Inc.
Project: Accurate Die Casting
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517
Certification NY No.: 10155

Sample: K6064
Samp. Description: MW-22
Primary column: Y
Units: ug/L
Column: DB-608 30m x 0.53mmID
Dilution: 1 Instrument: HP5890-P

Collected: 02/16/99
Received: 02/16/99
Prepared: 02/17/99
Analyzed: 02/19/99

Matrix: Water
QC Batch: 021799W2
%Solids:
Sample Size: 1 L

Number of analytes: 9

Parameter	Result	Col	Surrog Limits	Notes
PCB-1016	<.065	1		
PCB-1221	<.065	1		
PCB-1232	<.065	1		
PCB-1242	<.065	1		
PCB-1248	<.065	1		
PCB-1254	<.065	1		
PCB-1260	<.065	1		
2,4,5,6-Tetrachloro-m-Xylene (surrogate)	66.%	1	56-131	
Decachlorobiphenyl (surrogate)	32.%	1	# 57-126	

Notes:

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: February 22,1999 Monika Santucci

5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

FILE D. Crosby

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Construction Services, Room 267
50 Wolf Road, Albany, New York 12233-7010
Phone: (518) 457-9280 • **FAX:** (518) 457-7743
Website: www.dec.state.ny.us

APR 2 7 1999

John P. Cahill
Commissioner

FAX

Timothy Eddy, P.E.
Project Engineer
O'Brien and Gere Engineers, Inc.
5000 Brittonfield Parkway
P.O. Box 4873
Syracuse, New York 13221-4873

Dear Mr. Eddy:

Re: Site # 7-34-052
Former Accurate Die Casting Site, Onondaga County
Contractor Documents

The Department has completed the review of the contract documents for the groundwater collection system and provides the following comments.

1. Erosion Control and Construction Water Management: The plan states that wipe samples will be collected from the modular collection tank, "if required." Who will make this determination? The Department's representative should be made aware of this issue.

2. Health and Safety Plan: The plan must be certified by a health and safety professional or Certified Industrial Hygienist.

3. Health and Safety Plan, Section 4, Air Monitoring: The Department requires that dust monitoring be conducted by use of a hand-held particulate monitor and that the HSP reference and follow TAGM 4031, Fugitive Dust Suppression and Particulate Monitoring at Inactive Hazardous Waste Sites. This would include actions levels for particulates as specified in the TAGM.

4. Health and Safety Plan, Section 5, Site Control and Safety Procedures: The section should include a site figure which depicts, at a minimum, the exclusion zones, the contaminant reduction zone and the site perimeter. Since the HSP allows for workers not trained to conduct hazardous waste operations in areas of "non-intrusive work," it seems prudent to specify the areas that these workers should not enter. Further, the site perimeter should be specified because this is the point of sampling if the community health and safety action level are reached.

5. Health and Safety Plan, Section 7: The HASP should include the name and phone number of Department representatives and include my name and phone number and that of John May, NYSDEC, Construction Inspector. Further, the listing of emergency contacts should be placed at the beginning of the HASP possibly in the revision summary.

6. Health and Safety Plan, Section 7: Any major event, such as a spill, chemical exposure or injury, should be reported to the Department's representative. Further, the Department should receive a copy of the incident report.

7. The design indicates that shoring may be used for excavation of the groundwater collection trench, however, the HASP does not discuss this issue. It is suggested that the HASP describe in greater detail how workers will be protected if working within the trench and how the potential for trench collapse will be minimized.

The Department was advised that April 20, 1999 was the date for mobilization. It appears that mobilization did not occur. The Department requires a revised schedule and better communication between the engineer, the contractor, and the Department with regards to scheduling issues. Please respond to these comments as soon as possible so we can resolve these issues prior to the start of the construction. If you have any questions, please feel free to contact me at (518) 457-9285.

Sincerely,

David A. Crosby, P.E.
Project Manager
Western Field Services Section
Bureau of Construction Services
Division of Environmental Remediation

cc: J. Terwilliger, OBG Technical Services
H. Hamel, NYSDOH-Syracuse
J. May/C. Branagh, NYSDEC-Region 7
V. Nattanmai, NYSDEC-DER-BWRA

DAC/mj
bcc: G. Harris
D. Crosby
Dayfile
a:\contractdoc.wpd

734-052

file

O'BRIEN & GERE
ENGINEERS, INC.

May 13, 1999

Mr. David Crosby, P.E.
Bureau of Construction Services
Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-7010

Re: Former Accurate Die Casting Site
Fayetteville, NY

File: 2488/23123 #2

Dear Mr. Crosby:

Enclosed are four copies of the monthly progress report, required by the Order on Consent (#A7-0318-94-10) for the former Accurate Die Casting site in Fayetteville, New York, for the month of April 1999. Included in the progress report are the results of the monitoring activities associated with the SPDES Fact Sheet for the ground water treatment system through April 1999. If you have any questions regarding these reports, please do not hesitate to call me.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Timothy M. Eddy, HGW
Senior Project Scientist

I:\DIV71\PROJECTS\2488\23123\2_CORRES\4-99MOR.WPD
Attachments

cc: V. Nattanmai, P.E. - NYSDEC
A. English - NYSDEC
T. Male - NYSDEC
Central Field Unit: Project Attorney Accurate Die Site - NYSDEC
C. Branagh, P.E. - NYSDEC Region 7
Director, Bureau of Environmental Exposure Investigation - NYSDOH (2 copies)
H. Hamel - NYSDOH
C. Johnson, Esq. - ITT Corporation
C. Salcines - ITT Corporation
R. Alessi, Esq. - LeBoeuf, Lamb, Greene & MacRae
M. Peters, Esq. - LeBoeuf, Lamb, Greene & MacRae
T. Brown, P.E. - O'Brien & Gere Technical Services, Inc.
John Terwilliger - O'Brien & Gere Technical Services, Inc

O'Brien & Gere Engineers, Inc., an O'Brien & Gere company
5000 Brittonfield Parkway / P.O. Box 4873, Syracuse, New York 13221-4873
(315) 437-6100 / FAX (315) 463-7554 • http:// www.obg.com
and offices in major U.S. cities

FORMER ACCURATE DIE CASTING SITE
FAYETTEVILLE, NEW YORK

Monthly Progress Report for: April 1999

(a) Activities Performed/Correspondences with NYSDEC

1. During the month of April 1999, O'Brien & Gere operated the ground water collection and treatment system on behalf of ITT Industries. Between April 1 through April 30, 1999, a total of 540,900 gallons of ground water was treated: 351,830 gallons were recovered from recovery well RW-1; 188,970 gallons were recovered from RW-2; and 100 gallons were recovered from the sump located outside the northeast corner of the facility. As of April 1,1999, a total of 25,869,300 gallons of ground water has been treated since startup on February 5, 1996.

2. During the month of April 1999, O'Brien & Gere performed the sampling activities associated with the Sampling and Analysis Plan (March 1996), revised according to the NYSDEC letter dated April 1, 1997, and the SPDES Fact Sheet (#734052) required by the Consent Order. The results of the SPDES sampling of the ground water treatment system effluent are discussed in Item b.

3. O'Brien & Gere completed semi-annual sampling of site ground water on April 23,1999.

4. Recovery well RW-1 was rehabilitated during the week of April 12, 1999. Well efficiency, as measured by specific capacity, increased from 0.68 gpm/ft prior to rehabilitation to 3.8 gpm/ft afterwards.

5. The ground water collection trench contractor prepared and submitted the erosion control plan, construction water management plan, and health & safety plan to the NYSDEC. The NYSDEC provided comments to the plans in corrrespondence dated April 27, 1999.

(b) Sampling and Test Results

1. The analytical results associated with the SPDES Fact Sheet monitoring activities performed in April 1999 are summarized in Table 1. The laboratory analytical data sheets are provided as Attachment A.

(c) Projected Activities within next 45 days

1. Ground water monitoring activities will continue to be performed in accordance with the NYSDEC-approved Sampling & Analysis Plan dated March 1996, as modified in accordance with the recommendations of the Annual Report for 1997 submitted to the NYSDEC on January 27, 1998. Also, the treatment system performance monitoring will continue to be conducted in accordance with the SPDES Permit fact sheet, as modified on March 13, 1997 and November 21, 1997.

2. Continue operation of the ground water recovery and treatment system.

3. Address NYSDEC comments on the construction water management plan and health & safety plan.

4. Mobilization activities associated with the ground water collection trench installation will be completed during the week of May 3, 1999.

5. Trenching activities will commence during the week of May 17, 1999.

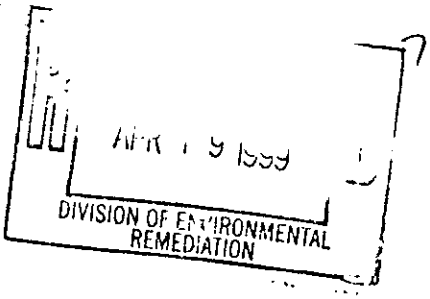
(d) Activities in support of Community Relations Plan

1. None

(f) Exceedences to SPDES Fact Sheet Limits

1. None

7-34-052 V-N
File



O'BRIEN & GERE
ENGINEERS, INC.

April 13, 1999

Mr. David Crosby, P.E.
Bureau of Construction Services
Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-7010

Re: Former Accurate Die Casting Site
Fayetteville, NY

File: 2488/23123 #2

Dear Mr. Crosby:

Enclosed are four copies of the monthly progress report, required by the Order on Consent (#A7-0318-94-10) for the former Accurate Die Casting site in Fayetteville, New York, for the month of March 1999. Included in the progress report are the results of the monitoring activities associated with the SPDES Fact Sheet for the ground water treatment system through March 1999. If you have any questions regarding these reports, please do not hesitate to call me.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Timothy M. Eddy, HGW
Senior Project Scientist

I:\DIV71\PROJECTS\2488\23123\2_CORRES\3-99MOR.WPD
Attachments

cc: V. Nattanmai, P.E. - NYSDEC
A. English - NYSDEC
T. Male - NYSDEC
Central Field Unit: Project Attorney Accurate Die Site - NYSDEC
C. Branagh, P.E. - NYSDEC Region 7
Director, Bureau of Environmental Exposure Investigation - NYSDOH (2 copies)
H. Hamel - NYSDOH
C. Johnson, Esq. - ITT Corporation
C. Salcines - ITT Corporation
R. Alessi, Esq. - LeBoeuf, Lamb, Greene & MacRae
M. Peters, Esq. - LeBoeuf, Lamb, Greene & MacRae
T. Brown, P.E. - O'Brien & Gere Technical Services, Inc.
Al Farrell, P.E.- O'Brien & Gere Engineers, Inc.

O'Brien & Gere Engineers, Inc. an O'Brien & Gere company
5000 Brittonfield Parkway / P.O. Box 4873 Syracuse, New York 13221-4873
(315) 437-6100 / FAX (315) 463-7554 • http://www.oag.com
and offices in major U.S. cities

FORMER ACCURATE DIE CASTING SITE
FAYETTEVILLE, NEW YORK

Monthly Progress Report for: March 1999

(a) Activities Performed/Correspondences with NYSDEC

1. During the month of March 1999, O'Brien & Gere operated the ground water collection and treatment system on behalf of ITT Industries. Between March 1 through March 31, 1999, a total of 353,590 gallons of ground water was treated: 133,270 gallons were recovered from recovery well RW-1; 218,700 gallons were recovered from RW-2; and 1,620 gallons were recovered from the sump located outside the northeast corner of the facility. As of April 1,1999, a total of 25,328,400 gallons of ground water has been treated since startup on February 5, 1996.

2. During the month of March 1999, O'Brien & Gere performed the sampling activities associated with the Sampling and Analysis Plan (March 1996), revised according to the NYSDEC letter dated April 1, 1997, and the SPDES Fact Sheet (#734052) required by the Consent Order. The results of the SPDES sampling of the ground water treatment system effluent are discussed in Item b.

3. On March 31, 1999 the treatment system flow alignment was modified to place the GAC#1 as the lead unit in preparation for changing out the carbon in GAC#2 unit.

(b) Sampling and Test Results

1. The analytical results associated with the SPDES Fact Sheet monitoring activities performed in February1999 are summarized in Table 1. The laboratory analytical data sheets are provided as Attachment A.

(c) Projected Activities within next 45 days

1. Continue operation of the ground water recovery and treatment system.

2. Redevelop recovery well RW-1 and test pump for proper operation.

3. The ground water collection trench contractor will prepare and submit the erosion control plan, construction water management plan, and health & safety plan to the NYSDEC.

4. O'Brien & Gere will conduct semi-annual sampling of site ground water in April 1999

(d) Project Schedule

1. Ground water monitoring activities will continue to be performed in accordance with the NYSDEC-approved Sampling & Analysis Plan dated March 1996, as modified in accordance with the recommendations of the Annual Report for 1997 submitted to the NYSDEC on January 27, 1998. Also, the treatment system performance monitoring will continue to be conducted in accordance with the SPDES Permit fact sheet, as modified on March 13, 1997 and November 21, 1997.

(e) Activities in support of Community Relations Plan

1. None

(f) Exceedences to SPDES Fact Sheet Limits

1. None

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Construction Services, Room 267
50 Wolf Road, Albany, New York 12233-7010
Phone: (518) 457-9280 • **FAX:** (518) 457-7743
Website: www.dec.state.ny.us

John P. Cahill
Commissioner

FAX

Timothy Eddy, P.E.
Project Engineer
O'Brien and Gere Engineers, Inc.
5000 Brittonfield Parkway
P.O. Box 4873
Syracuse, New York 13221-4873

Dear Mr. Eddy:

Re: Former Accurate Die Casting Site, Site # 7-34-052, Onondaga County
Groundwater Characterization

The Department has completed the review of your letter of April 8, 1999 regarding the groundwater characterization for the Accurate Die Casting site. The groundwater data does indicate that polychlorinated biphenols (PCB) are most likely not a concern for the groundwater treatment system. However, the monitoring wells tested only represent a small percentage of the groundwater which may reach the proposed groundwater collection trench. Further, due to the bio-accumulative ability of PCBs in the ecosystem, the Department must be sensitive to the potential of PCBs reaching Bishop Brook. As such, the Department request's one additional sampling round for PCBs for the influent and effluent of the groundwater collection system. It is requested that the sampling occur after the groundwater collection trench is installed and operating at a steady state condition.

Please respond to this letter within 30 days of receipt. If you have any questions, please feel free to contact me at 518-457-9285.

Sincerely,

David A. Crosby

David A. Crosby, P.E.
Senior Environmental Engineer
Western Field Services Section
Bureau of Construction Services
Division of Environmental Remediation

DAC/mj

cc: J. Terwilliger, OBG Technical Services
H. Hamel, NYSDOH-Syracuse
C. Rossi/C. Branagh, NYSDEC-Region 7

bcc: G. Harris
V.Nattanmai, DER-BWRA
J. May, DER-Region 7
D. Crosby
file
a:\adcpcb.wpd

TELEFAX

O'BRIEN & GERE TECHNICAL SERVICES, INC. *Direct Line Fax No. (315) 437-9800*

CONFIDENTIALITY NOTICE

Job Number: 10501

Number of Pages: 11 (including cover sheet) Date: May 11, 1999

If pages are missing or illegible, please contact telefax operator

TO: **Mr. David Crosby**

COMPANY: **NYSDEC**

FAX NO: **518/457-7743**

FROM: **John Terwilliger**

ORIGINAL —

x will follow via regular mail ____ will follow via overnight delivery ____ will not follow

MESSAGE:

These are the modifications made in response to your comments on the previously submitted HASP for the Accurate Die Cast project in Fayetteville, NY.

As I said on the phone today, it is the intent of OBG Tech to begin excavation on May 17, 1999. If this changes for any reason I will call both you and John May and advise by day end 5/13/99. In the meanwhile I will set up the site decon trailer, install silt fencing and delineate the safety zones.

From: Jeff Parsons
To: Limited.Brittonfield.TerwilJP
Date: 5/5/99 3:02PM
Subject: Accurate HASP

See attached HASP.

The figure should be modified to more clearly include other frames of reference, besides monitoring wells. I would highlight the various boundaries as follows:
Exclusion Zone - Pink
Contamination Reduction Zone - Yellow
Site Perimeter - Blue or Green.

It may be appropriate for us to consider the Exclusion Zone Perimter to also be the site Perimeter for purposes of Community Air Monitoring. Work Area Monitoring will be monitoring conducted in and around the trench in the immediate area of excavation activities. To Make this clearer for the DEC, we may want to set up "Exclusion Zones within Exclusion Zones." The inner exclusion zones will immediately surround the excavation area(s) and will define the boundaries for work area monitoring.

REVISION SUMMARY

REVISION DATE	DESCRIPTION OF CHANGES	REASON FOR CHANGE
April 5, 1999	Orginal Health and Safety Plan File Location: I:\TECH\PROJECTS\ITTGWCOLL\H&S\HASP.	Not Applicable
May 5,1999	1. **Rev. Summary Page** Added CSC certification. 2. **Section 4** Added Dust monitoring procedures. 3. **Section 7.1** Additional emergency contacts and numbers. 4. **Section 7.9.2** Copy of incident report to NYSDEC. 5. **Section 5.5** Added reference to Section 2.11 of the Corporate H&S Manual. 6. **Figure 2** Site diagram depicting work zo nes.	1. Request of NYSDEC 2. Request of NYSDEC 3. Request of NYSDEC 4. Request of NYSDEC 5. Request of NYSDEC 6. Request of NYSDEC

CERTIFICATION

This Health & Safety Plan (HASP) has been prepared in accordance with 29CFR1910.120, 29CFR1910.65, the O'Brien & Gere Corporate H&S Manual, and other applicable OSHA, DOT, and EPA regulations.

Jeffrey R. Parsons, CIH
Manager of Heath & Safety

PREFACE

This document describes the minimum anticipated protective measures necessary to ensure worker health and safety during the activities associated with this Health & Safety Plan. The employees involved with the activities of the this project must read and understand the contents of this document. We do not intend the contents of this document to cover all situations that may arise nor to waive any provisions specified in Federal, State and Local regulations or Site Owner / Contractor health and safety requirements. During this project, if an activity occurs that is not covered in this Health & Safety Plan, the subcontractor responsible for that activity will inform the O'Brien & Gere , Inc. Site Safety & Health Coordinator of the planned activity. The subcontractor will also ensure an amendment covering the planed activity is added to this site-specific Health & Safety Plan before the commencement of the activity.

SECTION 4 - AIR MONITORING & ACTION LEVELS

4. Monitoring

Air monitoring is to be performed in accordance with Program 2.1 of the O'Brien & Gere CHS Manual, *Airborne Materials Exposure,* and Program 2.22 of the O'Brien & Gere CHS Manual, *Hazardous Waste Operations*. Presented below is the site-specific information. The purpose of air monitoring is to verify the adequacy of PPE being used and to evaluate new hazards or changing site conditions.

The "**site**" refers to the entire work area designated for this project. The "**fenceline**" refers to the site perimeter and includes areas where the general public may be present. **Community action levels** generally apply at the fenceline or site perimeter. The "**work area**" is the area immediately surrounding various work activities and is the area within which "work area action levels" apply. Exclusion Zones may be setup to coincide with the perimeter of individual work areas or encompass several work areas. Where Exclusion Zones are adjacent to the fenceline, the most stringent of "work area and community action levels" shall apply.

4.1 Wind Indicator

Not required.

4.2 Air Monitoring Equipment to be Used

Constituent	**Monitor / Method**
VOCs	Photoionization Detector (PID) with 10.2 eV lamp
Combustible Vapors/Oxygen	Combustible Gas Meter (confined space entry)

NOTE: Monitoring Instruments will be calibrated prior to each full day of equipment usage or more frequently in accordance with manufacturers recommendations. Calibrations will be recorded on the ***Equipment Calibration Log*** *found in SECTION 4 of the CHS Manual.*

4.3 Work Area Air Monitoring

The following describes the methods and parameters to be used for PPE upgrades and work cessation. The action levels for total organic vapors and dust are readings above background (upwind) sustained for 5 minutes. VOCs are measured with a PID detector calibrated to isobutylene and dust is measured using real-time aerosol monitors (e.g., RAM-1, DustTrak, etc.). A combustible gas / oxygen meter will be required for entry into confined spaces, including excavations greater than four (4) feet deep.

TABLE 4.3 - Work Area Air Monitoring Action Levels

Contaminant / Method	Frequency	Action Level (sustained for 5 minutes)	SSHC Action
TOXIC VAPORS (VOCs) PID	1. When odors are encountered or changing site conditions affect hazards. 2. Prior to and continuous during confined space entry (i.e., excavations >4 ft. and tanks). *NOTE: a trench or pit with limited access over 4' may be considered a confined space.*	5 ppm	1. Increase to Level C PPE (half or full- face respirator) or use controls to reduce VOC concentrations below 5 ppm. 2. Conduct community air monitoring per Section 4.4 of this HASP.
		50 ppm	1. Increase to Level C PPE (full-face respirator) or use controls to reduce VOC concentrations below 50 ppm. 2. Continue community air monitoring per Section 4.4 of this HASP.
		250 ppm	1. **STOP** work and use ventilation, covers, vapor suppressants or other controls to reduce VOC levels below 250 ppm. 2. Continue community air monitoring per Section 4.4 of this HASP. 3. Immediately notify the O'Brien & Gere CSC. 4. Immediately notify the Former Accurate Die Casting Site representative.
COMBUSTIBLE VAPORS O_2 / LEL Meter	1. Prior to and continuous during confined space entry (i.e., excavations >4 ft. and tanks). *NOTE: a trench or pit with limited access over 4' may be considered a confined space.*	10% LEL	1. **STOP** work 2. Use ventilation or other controls to reduce combustible vapors. to keep combustible vapors <10% LEL.
OXYGEN O_2 / LEL Meter	1. Prior to and continuous during confined space entry (i.e., excavations >4 ft. and tanks). *NOTE: a trench or pit with limited access over 4' may be considered a confined space. Note: Oxygen measurements must always be taken with comb. gas measurements.*	<19.5% O_2 and >23.5% O_2 *Note: Air is normally 20.8% O_2*	1. **STOP** work 2. Use ventilation to restore acceptable oxygen levels OR use Level B PPE. 3. Notify the O'Brien & Gere CSC **prior** to confined space entry under oxygen deficient conditions.
DUST SSHC Observations	Continuous	0 - 1.0 mg/m³	1. Maintain dust controls (If visible dust is observed leaving the site, perform Community Air Monitoring as required in Section 4.4 of this HASP.)
		1.0 - 2.5 mg/m³	1. Increase dust controls & increase to ½ face Level C PPE 2. Conduct Community Air Monitoring as required in Section 4.4 of this HASP.
		>2.5 mg/m³	1. **STOP** work.

4.4 Community Air Monitoring

Real-time monitoring for VOCs at the perimeter of the Exclusion Zone will be performed when required based on work site activities and work area air monitoring. Regardless of instrument measurements, observations of dust leaving the site or odors at the fenceline will require modification of work practices or implementation of controls to protect the public. Community air monitoring will be performed at the perimeter of the Exclusion Zone, 200 feet downwind of the work area, or half the distance to the nearest residential or commercial structure, whichever is less.

TABLE 4.4 - Community Air Monitoring Action Levels

Type	Frequency	Action Level	SSHC Action
VOCs PID	1. 5 ppm or more above background is sustained for 5 minutes in the work area per Section 4.3 of this HASP. 2. When odors are detected at the fenceline.	5 ppm above background sustained for one minute at the site perimeter.	1. **STOP** work and continue to monitor. 2. Contact O'Brien & Gere CSC for appropriate action. 3. Notify Former Accurate Die Casting Site representative. 4. Work may continue when concentrations detected by the PID are reduced to below 5 ppm AND odors are not detectable at the fenceline. ***NOTE**: Monitoring will be performed within 20 feet of the perimeter of the nearest residential or commercial structure.*
DUST SSHC Observations	Continuous	0 - 0.1 mg/m³ 0.1 - 0.15 mg/m³ >0.15 mg/m³	1. Maintain dust controls 1. Increase dust controls until concentrations are below 0.1 mg/m³ 2. Notify [client] representative 1. **STOP** work 2. Notify a DEC representative and the O'Brien & Gere CSC 3. Re-evaluate dust control procedures and work methods.
ODORS SSHC Observations	Continuous	Strong, irritating, or "unusual" odors.	1. If odors are detected at the fenceline AND may result in public exposure, STOP work immediately, and take VOC measurements at the fenceline per the Community Air Monitoring Plan.

SECTION 7 - EMERGENCY RESPONSE & CONTINGENCY PLAN

7. Emergencies

This emergency response section details actions to be taken in the event of site emergencies. The SSHC is responsible for implementation of emergency response procedures.

7.1 Emergency Phone Numbers (to be posted on site)

Emergencies encountered on this site will be responded to via off-site emergency services and Former Accurate Die Casting Site personnel. The following master phone list will be prominently posted at the site command post.

EMERGENCY RESOURCES/PROCEDURES:

Person or Agency	Phone Number
LOCAL:	
FIRE	911
AMBULANCE	911
POLICE	911
HOSPITAL - St. Joseph's Hospital	911 or 448-5101
Occupational Physician - Industrial Medical Associates	(315) 478-1977
CIVIL DEFENSE:	
National Response Center (USEPA and U.S.C.G.)	(800) 424-8002
USEPA Environmental Response Team	(908) 321-6660
CHEMTREC	(800) 424-9300
New York State Emergency Response	(518) 457-7362
NYSDEC, David A.Crosby,P.E. Project Manager	(518) 457-9280
NYSDEC, CharlesBranagh,P.E. Region 7	(315) 426-7551
NYSDEC, John May, Construction Inspector	(315) 426-7551
CONTRACTORS:	

All line / pipe breaking and operation of electrical power (or any other system) must be identified and approved on the O'Brien & Gere ***Hot Work & Confined-Space Entry*** (Attachment 8). When required, O'Brien & Gere will follow the site owner's lockout / tagout program.

5.5 Excavations

All excavations greater than 5 feet deep require completion of a ***Soil Analysis Checklist*** and ***Daily Excavation Checklist*** (Attachments 6 and 7). Excavations greater than four (4) feet in depth are considered a confined space and require completion of an O'Brien & Gere ***Hot Work & Confined-Space Entry*** (Attachment 8) prior to entry. Shield/Shoring procedures can be found in SECTION 2.11 of the O'Brien &Gere CHS Manual.

5.6 Confined Space Entry

The O'Brien & Gere Confined Space Entry procedure in Program 2.5 of the O'Brien & Gere CHS Manual must be followed and a ***Hot Work & Confined-Space Entry Permit*** (Attachment 8) must be completed prior to entry. FULLY completed confined space entry permits must be sent to the O'Brien & Gere CSC when the permits expire or are canceled.

All persons entering manholes, tanks or similar confined spaces must have a body harness and lifeline attached. When vertical entry / exit is required greater than five (5) feet, a tripod and man-winch (or equivalent means of rescue) must be setup prior to entry. The standby person must be familiar with its operation. Off-site rescue services (i.e., fire department) MUST also be available and notified of the entry. Standby persons shall NOT enter confined spaces to conduct rescue or first aid activities. IF the potential for a hazardous atmosphere has been eliminated, THEN rescue or first aid personnel do NOT require an SCBA for entry.

5.7 Fall Protection

The SSHC must discuss deviations from this requirement and other O'Brien & Gere *Fall*

EMERGENCY RESOURCES/PROCEDURES:

Person or Agency	Phone Number
O'Brien & Gere O'Brien & Gere, Inc. (Syracuse office)	315-437-6400
Corporate Safety Coordinator (office)	315-637-2110

7.2 Emergency Route To St. Joseph's Hospital

(To be posted on site - Refer to Figure 1.)

1. **Take a RIGHT onto Genesee Street (RT 5 West) to I-481 North.**

2. **Take I-481 to I-690 West**

3. **Take I-690 West to Townsend Street Exit**

4. **Turn RIGHT onto Townsend Street..**

5. **Follow Townsend Street six intersections.**

6. **St. Joseph's Hospital is on the left.**

7.3 Emergency Inventory

In addition to those items specified elsewhere, the SSHC or designee will maintain the following equipment and protective clothing in the event of emergencies:

- Emergency eye-wash bottles;
- First aid / Bloodborne pathogens kit;
- Fire extinguishers (in mobile equipment, office trailers, near hot work, etc.);
- Three complete sets of Modified Level D PPE (in the support zone); and
- Air horns: Air horns will be kept in the Support Zone, on heavy equipment, and in other locations designated by the SSHC or designee.

officer of OSHA is notified within 8 hours should the emergency cause three (3) or more personnel to be injured and transported to the hospital, or if there is a fatality.

7.9.1 Injury / Illness

An ***Accident Investigation Form*** (Attachment 10) must be completed for all injuries or illnesses, even if they appear minor. The form must be completed or reviewed by the SSHC or designee. It will include, but is not limited to, the nature of the problem, time, location, and corrective actions taken to prevent recurrence. *This report must be completed and sent to the O'Brien & Gere CSC and Former Accurate Die Casting Site within 24 hours.*

7.9.2 Incident Report

Upon occurrence of a severe injury and any fire, explosion, or other property damage in excess of $1,000, the SSHC or designee must notify the O'Brien & Gere CSC within 24 hours and submit an ***Incident Report*** within three days. An additional copy of the *Incident Report* will be sent to the NYSDEC representative. The CSC may assist in writing the ***Incident Report*** which should be organized in the following format:

A. Background Information (Facts) - List information in chronological order. Information should consist of first-hand observations and events that are known to have occurred. Include events leading up to the incident and through emergency response activities.

B. Analysis - Describe what appears to have happened as supported by the background information.

C. Causal Factor(s) - Identify unsafe conditions or acts which directly resulted in the incident.

D. Contributing Factors - Identify unsafe conditions or acts which were necessary for the incident to occur but did not directly cause the incident.

E. Recommendations - Assign each recommendation to the appropriate person(s) along with completion dates. Include recommendations to improve emergency response when appropriate.

7.10 Natural Hazards

Lightning storms, hurricanes, and tornadoes, all of which are obviously unavoidable and uncontrollable, may be treated as a natural disaster. In the event of severe weather conditions, all site work may be halted by the SSHC or designee. Site evacuation may take place and the site shall be secured to the extent possible.

7.11 Restoration and Salvage

After an emergency, prompt restoration of utilities, fire protection, equipment, security equipment, medical supplies, and other equipment will reduce the possibility of further loss. Temporary systems may have to be implemented until permanent systems are back on-line.

FILE COPY

O'BRIEN & GERE
ENGINEERS, INC.

RECEIVED
S

May 14, 1999

Mr. David A. Crosby, P.E.
Bureau of Construction Services
New York State Department of Environmental Conservation
50 Wolf Road, Room 267
Albany, New York 12233-7010

Re: Former Accurate Die Casting Site
Fayetteville, New York
(Site # 7-34-052)

File: 2488\23123 #2

Dear Mr. Crosby:

In response to your letter dated May 10, 1999, an influent and effluent sample for the groundwater treatment system at the Former Accurate Die Casting site will be analyzed for polychlorinated biphenols (PCBs) on one occasion after completing construction of the groundwater collection trench. Presently, we expect that the groundwater collection trench will be completed and operating by July 1999. However, it is proposed that these two samples be collected during one of the treatment system sampling events occurring in October 1999, coincidental with the next scheduled groundwater sampling event. Waiting until that time will enable an evaluation of influent and effluent water quality for the treatment system after the groundwater collection trench has had a period to influence groundwater in the previously remediated PAH/VOC/PCB Soils Area.

If you have any comments regarding this proposal, please do not hesitate to call either Deborah Wright or me at (315) 437-6100.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Alfred R. Farrell, P.E.
Senior Project Engineer

i:71\2488\23123\2\pcb_sam.wpd

cc: D. Wright, CPG - O'Brien & Gere Engineers, Inc.
H. Hamel - NYSDOH Syracuse
C. Rossi - NYSDEC Region 7
C. Branagh - NYSDEC Region 7

O'Brien & Gere Engineers, Inc., an O'Brien & Gere company
5000 Brittonfield Parkway / P.O. Box 4873, Syracuse, New York 13221-4873
(315) 437-6100 / FAX (315) 463-7554 • http:// www.obg.com
... and offices in major U.S. cities

FILE COPY

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Construction Services, Room 267
50 Wolf Road, Albany, New York 12233-7010
Phone: (518) 457-9280 • **FAX:** (518) 457-7743
Website: www.dec.state.ny.us

MAY 2 8 1999

John P. Cahill
Commissioner

FAX

Mr. Alfred Farrell, P.E.
Senior Project Engineer
O'Brien and Gere Engineers, Inc.
5000 Brittonfield Parkway
P.O. Box 4873
Syracuse, New York 13221-4873

Dear Mr. Farrell:

Re: Former Accurate Die Casting Site
Site # 7-34-052
Onondaga County
Groundwater Collection System

The Department has completed the review of your May 14, 1999 letter regarding the collection of influent and effluent samples for PCB analysis from the groundwater collection system. Your sampling plan, as outlined in your letter (see enclosed) is acceptable. Please advise this office of the sampling date when it is determined.

The Department appreciates your attention to this issue. If you have any questions, please feel free to contact me at (518) 457-9285.

Sincerely,

David A. Crosby, P.E.
Environmental Engineer
Central Field Services Section
Bureau of Construction Services

cc: H. Hamel - NYSDOH, Syracuse

DAC/ts
bcc: J. May/C. Branagh - NYSDEC, Region 7
C. Rossi - NYSDEC, Region 7
V. Nattanmai - NYSDEC, DER, BWRA
G. Harris
D. Crosby
Dayfile
A:\gwpcbapp.wpd

O'BRIEN & GERE
ENGINEERS, INC.

May 14, 1999

Mr. David A. Crosby, P.E.
Bureau of Construction Services
New York State Department of Environmental Conservation
50 Wolf Road, Room 267
Albany, New York 12233-7010

Re: Former Accurate Die Casting Site
Fayetteville, New York
(Site # 7-34-052)

File: 2488\23123 #2

Dear Mr. Crosby:

In response to your letter dated May 10, 1999, an influent and effluent sample for the groundwater treatment system at the Former Accurate Die Casting site will be analyzed for polychlorinated biphenols (PCBs) on one occasion after completing construction of the groundwater collection trench. Presently, we expect that the groundwater collection trench will be completed and operating by July 1999. However, it is proposed that these two samples be collected during one of the treatment system sampling events occurring in October 1999, coincidental with the next scheduled groundwater sampling event. Waiting until that time will enable an evaluation of influent and effluent water quality for the treatment system after the groundwater collection trench has had a period to influence groundwater in the previously remediated PAH/VOC/PCB Soils Area.

If you have any comments regarding this proposal, please do not hesitate to call either Deborah Wright or me at (315) 437-6100.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Alfred R. Farrell, P.E.
Senior Project Engineer

i:71\2488\23123\2\pcb_sam.wpd

cc: D. Wright, CPG - O'Brien & Gere Engineers, Inc.
H. Hamel - NYSDOH Syracuse
C. Rossi - NYSDEC Region 7
C. Branagh - NYSDEC Region 7

O'Brien & Gere Engineers, Inc., an O'Brien & Gere company
5000 Brittonfield Parkway / P.O. Box 4873, Syracuse, New York 13221-4873
(315) 437-6100 / FAX (315) 463-7554 • http:// www.obg.com
and offices in major U.S. cities

FILE

O'BRIEN & GERE
ENGINEERS, INC.

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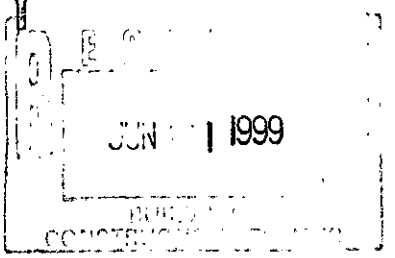

May 26, 1999

Mr. David Crosby, P.E.
Bureau of Construction Services
Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-7010

Re: Former Accurate Die Casting Site/Fayetteville, New York

File: 2488/23123 #2

Dear Mr. Crosby:

This letter presents the plan for addressing the surplus excavated materials ("spoil"), resulting from construction of the groundwater collection trench, presently being stockpiled at the former Accurate Die Casting site in Fayetteville, New York. As discussed today, approximately 300 cubic yards of surplus excavated material has been stockpiled. To characterize this material, three discrete samples will be collected and analyzed for volatile organic compounds (VOCs) using EPA Method 8260 with Preservation Method 5035. Only "spoil" material that does not exhibit any individual VOC equal to or greater than 1 mg/kg, or which does not exhibit a total VOCs concentration equal to or greater than 10 mg/kg, will remain on-site.

It is proposed that "spoil" meeting the remedial action objectives identified above will be placed into the previously established Corrective Action Management Unit (CAMU) located on site and shown on the Construction Drawings for the groundwater collection trench. Prior to placing material into the CAMU, approval from the New York State Department of Environmental Conservation (NYSDEC) will be requested based on the sampling results. If approved, then a portion of the CAMU cover comprising 12-inches of clean fill and topsoil will be stripped and set aside. The "spoil" material will then be placed into the CAMU and graded to minimize the presence of unsightly mounds and depressions. To the extent practicable, the horizontal limits of the CAMU will be minimized. Following placement, the "spoil" will be covered with 12-inches of clean fill and topsoil as required by the using the material stripped and set aside previously. As necessary, additional clean fill and topsoil will be brought to the site to complete the work.

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... and offices in major U.S. cities

If you have any questions or comments regarding the proposed activities, please do not hesitate to call me or Deborah Wright at (315) 437-6100.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Alfred R. Farrell, P.E.
Senior Project Engineer

I:\DIV71\PROJECTS\2488\23123\2_CORRES\5.WPD

cc: V. Nattanmai, P.E. - NYSDEC
J. Mae - NYSDEC, Syracuse Regional Office
H. Hamel - NYSDOH, Syracuse
C. Johnson, Esq. - ITT Corporation
C. Salcines - ITT Corporation
R. Alessi, Esq. - LeBoeuf, Lamb, Greene & MacRae
M. Peters, Esq. - LeBoeuf, Lamb, Greene & MacRae
T. Brown, P.E. - O'Brien & Gere Technical Services, Inc.
D. Wright, C.P.G. - O'Brien & Gere Engineers, Inc.
J. Terwilliger, P.E. - O'Brien & Gere Technical Services, Inc.

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New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Construction Services, Room 267
50 Wolf Road, Albany, New York 12233-7010
Phone: (518) 457-9280 • **FAX:** (518) 457-7743
Website: www.dec.state.ny.us

John P. Cahill
Commissioner

JUN 03 1999

FAX

Mr. Alfred Farrell, P.E.
Senior Project Engineer
O'Brien and Gere Engineers, Inc.
5000 Brittonfield Parkway
P.O. Box 4873
Syracuse, New York 13221-4873

Dear Mr. Farrell:

Re: Former Accurate Die Casting Site
Site No. 7-34-052
Onondaga County
Surplus Excavated Material Plan

The Department has completed the review of your May 26, 1998 letter regarding the handling of surplus excavated material "spoil soil" from the construction of the groundwater collection trench. Your sampling and soil management plan, as outlined in your letter (see enclosed), is acceptable. Please advise this Office of the sampling date when it is determined.

If you have any questions, please feel free to contact me at (518) 457-9285.

Sincerely,

David A. Crosby

David A. Crosby, P.E.
Environmental Engineer
Central Field Services Section
Bureau of Construction Services
Division of Environmental Remediation

Enclosure
cc: H. Hamel - NYSDOH, Syracuse

DAC:mm
bcc: J. May/C. Branagh - NYSDEC, Region 7
C. Rossi - NYSDEC, Region 7
V. Nattanmai - BWRA
G. Harris
D. Crosby
Dayfile
A:\soilplan.wpd

O'BRIEN & GERE ENGINEERS, INC.

TELEFAX

Direct Line Fax No. (315) 463-7554

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This facsimile transmission is intended only for the use of the individual or entity to which it is addressed, and may contain confidential information belonging to the sender. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution, or the taking of any action in reliance on the contents of this information is strictly prohibited. If you have received this transmission in error, please immediately notify us by telephone to arrange for the return of these documents.

Job Number 2488/23123

DATE: 26 MAY 99

NUMBER OF PAGES BEING SENT 3 (INCLUDING THIS ONE).

TO: Dave Crosby

COMPANY: NYSDEC

FAX NO: (518) 457-7743

FROM: Al Ferrell

MESSAGE: The sampling is presently on-hold pending receipt of the necessary sampling equipment. I'll call once final arrangements are made and we're set to collect the samples for analysis.

IF YOU DO NOT RECEIVE ANY OF THESE PAGES PLEASE CONTACT THE TELECOPY OPERATOR AT (315) 437-1990 EXTENSION 2593 AS SOON AS POSSIBLE. *THANK YOU.*

TRANSMISSION COMPLETED AND CONFIRMED:

DATE _____ TIME _____ SIGNATURE _____

O'Brien & Gere Engineers, Inc., an O'Brien & Gere Limited Company
5000 Brittonfield Parkway/PO Box 4873/Syracuse, NY 13221/(315) 437-6100
and offices in major U.S. cities

O'BRIEN & GERE
ENGINEERS, INC.

May 26, 1999

Mr. David Crosby, P.E.
Bureau of Construction Services
Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-7010

Re: Former Accurate Die Casting Site Fayetteville, New York

File: 2488/23123 #2

Dear Mr. Crosby:

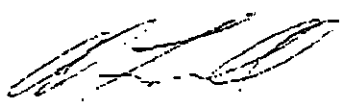
This letter presents the plan for addressing the surplus excavated materials ("spoil"), resulting from construction of the groundwater collection trench, presently being stockpiled at the former Accurate Die Casting site in Fayetteville, New York. As discussed today, approximately 300 cubic yards of surplus excavated material has been stockpiled. To characterize this material, three discrete samples will be collected and analyzed for volatile organic compounds (VOCs) using EPA Method 8260 with Preservation Method 5035. Only "spoil" material that does not exhibit any individual VOC equal to or greater than 1 mg/kg, or which does not exhibit a total VOCs concentration equal to or greater than 10 mg/kg, will remain on-site.

It is proposed that "spoil" meeting the remedial action objectives identified above will be placed into the previously established Corrective Action Management Unit (CAMU) located on site and shown on the Construction Drawings for the groundwater collection trench. Prior to placing material into the CAMU, approval from the New York State Department of Environmental Conservation (NYSDEC) will be requested based on the sampling results. If approved, then a portion of the CAMU cover comprising 12-inches of clean fill and topsoil will be stripped and set aside. The "spoil" material will then be placed into the CAMU and graded to minimize the presence of unsightly mounds and depressions. To the extent practicable, the horizontal limits of the CAMU will be minimized. Following placement, the "spoil" will be covered with 12-inches of clean fill and topsoil as required by the using the material stripped and set aside previously. As necessary, additional clean fill and topsoil will be brought to the site to complete the work.

If you have any questions or comments regarding the proposed activities, please do not hesitate to call me or Deborah Wright at (315) 437-6100.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.



Alfred R. Farrell, P.E.
Senior Project Engineer

i:2488\23123\235.wpd

cc: V. Nattanmai, P.E. - NYSDEC (without enclosures)
J. Mae - NYSDEC, Syracuse Regional Office (1copy)
H. Hamel - NYSDOH, Syracuse (1 copy)
C. Johnson, Esq. - ITT Corporation
C. Salcines - ITT Corporation
R. Alessi, Esq. - LeBoeuf, Lamb, Greene & MacRae
M. Peters, Esq. - LeBoeuf, Lamb, Greene & MacRae
T. Brown, P.E. - O'Brien & Gere Technical Services, Inc.
D. Wright, C.P.G. - O'Brien & Gere Engineers, Inc.
J. Terwilliger, P.E. - O'Brien & Gere Technical Services, Inc.

FILE

FILE COPY

New York State Department of Environmental Conservation
615 Erie Boulevard West
Syracuse, NY 13204-2400
Telephone: (315)-426-7551

MEMORANDUM

TO: David Crosby
FROM: John May
SUBJECT: Accurate Die Cast
DATE: 6/4/99

This morning I met with Dave Carnevale of O'Brien & Gere at the Accurate Die Cast Site. He collected soil samples from the two stockpiles that remain following the backfill of the trench. Two samples were taken from the larger pile to the East of the MH. One from the South face and one from the South. One sample was taken from the East face of the smaller pile located West of the MH. The collection of the samples was done using method SW5035. A procedure that I had not seen before. This is the reason OBG did not have the "equipment" to sample before. The sampling appeared to go smoothly and the locations were acceptable to me.

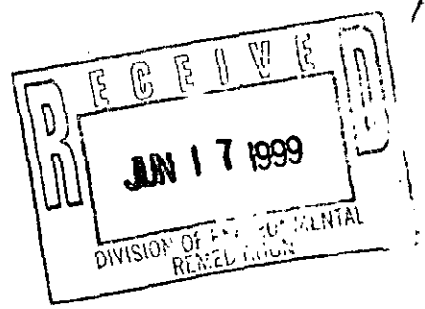
Ken McLaughlin from OBG Tech was also on site. He told me that the pump was in their shop but some other hardware needed to make it operable had not been delivered. The modular water tank has been disassembled. No water is in the MH. Final assembly may take place next week. They may have to haul in water to check out to plumbing.

Contact me if you have any questions or require additional field inspections.

~~VN~~ file

731-052

O'BRIEN & GERE
ENGINEERS, INC.



June 14, 1999

Mr. David Crosby, P.E.
Bureau of Construction Services
Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-7010

Re: Former Accurate Die Casting Site
Fayetteville, NY

File: 2488/23123 #2

Dear Mr. Crosby:

Enclosed are four copies of the monthly progress report, required by the Order on Consent (#A7-0318-94-10) for the former Accurate Die Casting site in Fayetteville, New York, for the month of May 1999. Included in the progress report are the results of the monitoring activities associated with the SPDES Fact Sheet for the ground water treatment system through May 1999. If you have any questions regarding these reports, please do not hesitate to call me.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Alfred R. Farrell, P.E.
Senior Project Engineer

I:\DIV71\PROJECTS\2488\23123\2_CORRES\5-99MOR.WPD
Attachments

cc: V. Nattanmai, P.E. - NYSDEC
~~A. English~~ - NYSDEC
T. Male - NYSDEC
Central Field Unit: Project Attorney Accurate Die Site - NYSDEC
C. Branagh, P.E. - NYSDEC Region 7
Director, Bureau of Environmental Exposure Investigation - NYSDOH (2 copies)
H. Hamel - NYSDOH
C. Johnson, Esq. - ITT Corporation
C. Salcines - ITT Corporation
R. Alessi, Esq. - LeBoeuf, Lamb, Greene & MacRae
M. Peters, Esq. - LeBoeuf, Lamb, Greene & MacRae
T. Brown, P.E. - O'Brien & Gere Technical Services, Inc.
John Terwilliger - O'Brien & Gere Technical Services, Inc

O'Brien & Gere Engineers, Inc., an O'Brien & Gere company
5000 Brittonfield Parkway, P.O. Box 4873, Syracuse, New York 13221-4873
315 437-6100 FAX 1318 437-7554 e-mail www.obg.com
and offices in major U.S. cities

FORMER ACCURATE DIE CASTING SITE
FAYETTEVILLE, NEW YORK

Monthly Progress Report for: May 1999

(a) Activities Performed/Correspondences with NYSDEC

1. During the month of May 1999, O'Brien & Gere continued operating the ground water collection and treatment system on behalf of ITT Industries. As of May 28,1999, a total of 26,461,740 gallons of ground water has been treated since startup on February 5, 1996. During the period since the monthly progress report for April 1999, 592,440 gallons of groundwater was treated.

2. During the month of May 1999, O'Brien & Gere performed the sampling activities associated with the SPDES Fact Sheet (#734052) required by the Consent Order. The results of the SPDES sampling of the groundwater treatment system effluent are discussed in Item b.

3. O'Brien & Gere Technical Services completed construction of the groundwater collection trench and sump between the former PAH/VOC/PCB Soils Area and Bishop Brook. Remaining work to be completed includes installing the electrical conduit and forcemain to the existing treatment building. Presently, approximately 300 cubic yards of soil excavated during construction of the groundwater collection trench is being stockpiled on site pending the results of laboratory analyses, and determination regarding if the material can be placed within the CAMU established on site. In accordance with the NYSDEC-approved Work Plan, three samples of the stockpiled soil were collected using USEPA sample preservation method 5035 and submitted for volatile organic compound analysis using USEPA method 8260.

4. The NYSDEC provided a letter dated May 28, 1999 approving the proposal to complete the one time requirement to collect an influent and effluent sample for PCB analysis from the groundwater collection system in October 1999.

(b) Sampling and Test Results

1. The analytical results associated with the SPDES Fact Sheet monitoring activities performed in May 1999 are summarized in Table 1. The laboratory analytical data sheets are provided as Attachment A.

2. The groundwater levels recorded in connection with the April 23, 1999 semi-annual sampling event are summarized in Table 2. Monitoring well MW-19 was dry and a groundwater sample could not be collected for analysis.

3. The analytical results associated with the April 23, 1999 semi-annual sampling event of monitoring wells MW-6, MW-9, MW-10, MW-11, MW-14, MW-17, MW-18, MW-21, MW-22 and MW-24 and the sump are summarized in Tables 3 and 4. Monitoring well MW-19 was dry and a groundwater sample could not be collected for analysis. The laboratory analytical data sheets are provided as Attachment B.

(c) Projected Activities within next 45 days

1. Groundwater monitoring activities will continue to be performed in accordance with the NYSDEC-approved Sampling & Analysis Plan dated March 1996, as modified in accordance with the recommendations of the Annual Report for 1997 submitted to the NYSDEC on January 27, 1998. Also, the treatment system performance monitoring will continue to be conducted in accordance with the SPDES Permit fact sheet, as modified on March 13, 1997 and November 21, 1997.

2. Continue operation of the groundwater recovery and treatment system.

3. Complete construction activities connected with the groundwater collection trench installation.

(d) Activities in support of Community Relations Plan

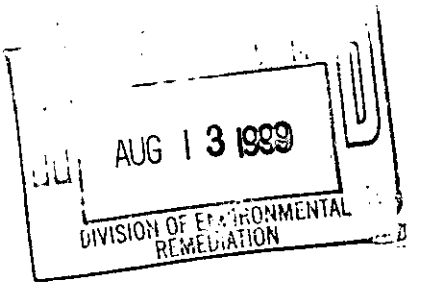
1. None

(e) Exceedences to SPDES Fact Sheet Limits

1. None

SRP/FILE

O'BRIEN & GERE
ENGINEERS, INC.



7-34052

August 10, 1999

Mr. David Crosby, P.E.
Bureau of Construction Services
Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-7010

Re: Former Accurate Die Casting Site
Fayetteville, NY

File: 2488/23123 #2

Dear Mr. Crosby:

Enclosed is the monthly progress report, required by the Order on Consent (#A7-0318-94-10) for the former Accurate Die Casting site in Fayetteville, New York, for the month of July 1999. Included in the progress report are the results of the monitoring activities associated with the SPDES Fact Sheet for the ground water treatment system through July 1999. If you have any questions regarding these reports, please do not hesitate to call me.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Alfred R. Farrell, P.E.
Senior Project Engineer

I:\DIV71\PROJECTS\2488\23123\2_CORRES\7-99MOR.WPD
Attachments

cc: V. Nattanmai, P.E. - NYSDEC
A. English - NYSDEC
T. Male - NYSDEC
Central Field Unit: Project Attorney Accurate Die Site - NYSDEC
C. Branagh, P.E. - NYSDEC Region 7
Director, Bureau of Environmental Exposure Investigation - NYSDOH (2 copies)
H. Hamel - NYSDOH
M. Peters, Esq. - LeBoeuf, Lamb, Greene & MacRae
C. Johnson, Esq. - ITT Industries, Inc.
T. Brown, P.E. - O'Brien & Gere Technical Services, Inc.
R. Cheesman, P.E. - O'Brien & Gere Technical Services, Inc

O'Brien & Gere Engineers, Inc. an O'Brien & Gere company
5000 Brittonfield Parkway / P.O. Box 4873, Syracuse, New York 13221-4873
(315) 437-6100 / FAX (315) 463-7554 • http://www.obg.com

FORMER ACCURATE DIE CASTING SITE
FAYETTEVILLE, NEW YORK

Monthly Progress Report for: July 1999

(a) Activities Performed/Correspondences with NYSDEC

1. During the month of July 1999, O'Brien & Gere continued operating the ground water collection and treatment system. As of July 30,1999, a total of 28,089,110 gallons of ground water has been treated since startup on February 5, 1996. Since July 1, 1999, 732,070 gallons of groundwater was treated; 561,030 gallons from recovery well RW-1, 168,830 gallons from RW-2, and 2,210 gallons from the sump outside the northeast corner of the building. No flow was recovered from the groundwater collection trench constructed in the former VOC/PAH/PCB Soils Area during the period.

2. During the month of July 1999, O'Brien & Gere performed the sampling activities associated with the SPDES Fact Sheet (#734052) required by the Consent Order. The results of the SPDES sampling of the groundwater treatment system effluent are discussed in Item b.

3. O'Brien & Gere Technical Services placed approximately 300 cubic yards of soil, excavated during construction of the groundwater collection trench, into the Corrective Action Management Unit (CAMU) at the site. Approval to do so was provided by the NYSDEC in a letter dated July 14, 1999.

(b) Sampling and Test Results

1. The analytical results associated with the SPDES Fact Sheet monitoring activities performed in July 1999 are summarized in Table 1. The laboratory analytical data sheets are provided as Attachment A.

(c) Projected Activities within next 45 days

1. The treatment system performance monitoring will continue to be conducted in accordance with the SPDES Permit fact sheet, as modified on March 13, 1997 and November 21, 1997.

2. Continue operation of the groundwater recovery and treatment system.

(d) Activities in support of Community Relations Plan

1. None

(e) Exceedences to SPDES Fact Sheet Limits

1. None

D. Crosby

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Construction Services, Room 267
50 Wolf Road, Albany, New York 12233-7010
Phone: (518) 457-9280 • **FAX:** (518) 457-7743
Website: www.dec.state.ny.us

John P. Cahill
Commissioner

FAX

JUL 14 1999

Alfred Farrell, P.E.
Senior Project Engineer
O'Brien and Gere Engineers, Inc.
5000 Brittonfield Parkway
P.O. Box 4873
Syracuse, New York 13221-4873

Dear Mr. Farrell:

RE: Site # 7-34-052
Former Accurate Die Casting Site
Onondaga County
Surplus Excavated Soil

The Department has completed the review of your letter of June 25, 1999. Your request to place the surplus excavated soil in the Corrective Action Management Unit (CAMU) is acceptable. Please provide the Department the approximate date of the work so we can provide field oversight.

The Department appreciates your continuing efforts to remediate the Accurate Die Casting site. If you have any questions, please feel free to contact me at (518) 457-9285.

Sincerely,

David A. Crosby

David A. Crosby, P.E.
Senior Environmental Engineer
Western Field Services Section
Bureau of Construction Services
Division of Environmental Remediation

cc: Tim Eddy -, OBG Engineering Services
Henriette Hamel - NYSDOH, Syracuse

DAC/ts
bcc: J. May/C. Branagh - NYSDEC, Region 7
V. Nattanmai - DER, BWRA
G. Harris
D. Crosby
Dayfile
a:\camusoil.wpd

FILE

O'BRIEN & GERE
ENGINEERS, INC.

June 25, 1999

Mr. David Crosby, P.E.
Bureau of Construction Services
Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, New York 12233-7010

Re: Former Accurate Die Casting
Site/Fayetteville, New York

File: 2488/23123 #2

Dear Mr. Crosby:

Approval from the New York State Department of Environmental Conservation (NYSDEC) is requested to place surplus excavated materials ("spoil"), resulting from construction of the groundwater collection trench, into the Corrective Action Management Unit (CAMU) at the former Accurate Die Casting site in Fayetteville, New York. Attached are the results of the volatile organic compounds (VOCs) analyses performed on the "spoil" presently being stockpiled. As described in our May 26, 1999 letter to you, approximately 300 cubic yards of surplus excavated material have been stockpiled. To characterize this material, three discrete samples were collected on June 4, 1999 and analyzed for VOCs using EPA Method 8260 with Preservation Method 5035. Mr. John May of the NYSDEC office in Syracuse was present on-site during the sampling. Presented below are background discussion and our recommendations.

BACKGROUND

The soil piles were created as a result of the recent ground water interceptor trench excavation. The piles represent spoils which could not be placed back into the excavation. Of the two soil piles, the easternmost pile (located east of the manhole) was the largest. The eastern pile was identified for sampling purposes as Soil Pile #1. The western pile (located west of the manhole) was identified as Soil Pile #2. Soil samples were collected for VOCs using USEPA Method 5035 and percent solids. Two samples were collected from Soil Pile #1, one from the south face, and one from the north face. One sample was collected from the east face of Soil Pile #2.

The field collection method for 5035 was based on the *High Concentration Soil Samples Preserved in the Field* protocol. The 40-ml vials containing methanol were weighed in the field to ensure that there was no loss of methanol prior to filling the vials. The following summarizes these results:

O'Brien & Gere Engineers, Inc., an O'Brien & Gere company
5000 Brittonfield Parkway / P.O. Box 4873, Syracuse, New York 13221-4873
(315) 437-6100 / FAX (315) 463-7554 • http:// www.obg.com
. . . and offices in major U.S. cities

	Initial (g)	Prior to Sampling (g)	
Vial 1	33.70	33.70	Soil Pile #1 - South Face
Vial 2	33.75	33.75	Soil Pile #1 - South Face
Vial 3	33.75	33.75	Sample not submitted due to loss of methanol
Vial 4	33.79	33.80	Soil Pile #1 - North Face
Vial 5	33.80	33.80	Soil Pile #2 - East Face
Vial 6	33.55	33.55	Soil Pile #2 - East Face

Soil pile samples were collected approximately 1-ft below the side face of each pile. Dedicated plastic syringes were used to obtain 5 +/- 0.5 grams of sample. The sample weights were verified using a digital scale with an accuracy of 0.01 grams. The soil samples were then placed into the 40-ml vials, each containing 10-ml of methanol. The 40-ml vials were re-weighed. The following summarizes these results:

	Sample Weight (g)	Vial Containing Sample (g)
Vial 1	4.74	38.43
Vial 2	4.92	38.65
Vial 3	5.10	38.72
Vial 4	4.87	38.52
Vial 5	4.90	38.58
Vial 6	4.84	38.42

Soil samples collected for percent solids analyses were placed into unpreserved 4-oz. glass jars. In addition, a trip blank was included for QA/QC purposes.

Subsequent to collection, the samples were placed into a cooler containing ice. The samples were hand-delivered to O'Brien & Gere Laboratories, Inc. A copy of the Chain of Custody is attached as well.

RECOMMENDATIONS

Consistent with the May 26, 1999 letter regarding the handling of surplus excavated material ("spoil"), which was approved by the NYSDEC by your June 3, 1999 letter, it is proposed that the "spoil" presently being stockpiled on site be placed into the previously established Corrective Action Management Unit (CAMU) since the results show that these soils satisfy the remedial action objectives (RAOs) of 1 ppm for individual VOC and 10 ppm for total VOCs.

As described in the May 26, 1999 letter, a portion of the CAMU cover comprising 12-inches of clean fill and topsoil will be stripped and set aside. The "spoil" material will then be placed into the CAMU and graded to minimize the presence of unsightly mounds and depressions. To the practicable extent, the horizontal limits of the CAMU will be minimized. Following placement, the "spoil" will be covered with 12-inches of clean fill and topsoil as required by the using the material stripped and set aside previously. As necessary, additional clean fill and topsoil will be brought to the site to complete the work.

We will await approval from the NYSDEC before proceeding further and placing "spoil" into the CAMU. If you have any questions or comments regarding the proposed activities, please do not hesitate to call me or Deborah Wright at (315) 437-6100.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Alfred R. Farrell, P.E.
Senior Project Engineer

I:\DIV71\PROJECTS\2488\23123\2_CORRES\6.WPD

cc: V. Nattanmai, P.E. - NYSDEC
J. Mae - NYSDEC, Syracuse Regional Office
H. Hamel - NYSDOH, Syracuse
C. Johnson, Esq. - ITT Corporation
C. Salcines - ITT Corporation
R. Alessi, Esq. - LeBoeuf, Lamb, Greene & MacRae
M. Peters, Esq. - LeBoeuf, Lamb, Greene & MacRae
T. Brown, P.E. - O'Brien & Gere Technical Services, Inc.
D. Wright, C.P.G. - O'Brien & Gere Engineers, Inc.
R. Cheesman - O'Brien & Gere Technical Services, Inc.

O'Brien & Gere Laboratories,Inc.

Analytical Results Method: 8260

Client: O'Brien & Gere Technical Services, Inc.
Project: Accurate Die Casting
Proj. Desc: Fayetteville, New York

Job No.: 2488.080.517
Certification NY No.: 10155

Sample: M3750
Samp. Description: Soil Pile #1 South Face
Instrument: HP5970 GC/MS#2
Units: ug/Kg Dry weight
Number of analytes: 62

Collected: 06/04/99
Received: 06/04/99
Prepared: 06/10/99

Matrix: Solid
QC Batch: 061099S2
%Solids: 87.5
Sample size: 4.72 g

Parameter	Result	Surrog Limits	Dilution	Analyzed	Notes
Dichlorodifluoromethane	<530.		105.94	06/10/99	
Chloromethane	<530.		105.94	06/10/99	
Vinyl chloride	<530.		105.94	06/10/99	
Bromomethane	<530.		105.94	06/10/99	
Chloroethane	<530.		105.94	06/10/99	
Trichlorofluoromethane	<530.		105.94	06/10/99	
1,1-Dichloroethene	<260.		105.94	06/10/99	
Methylene chloride	<530.		105.94	06/10/99	
trans-1,2-Dichloroethene	<260.		105.94	06/10/99	
1,1-Dichloroethane	<260.		105.94	06/10/99	
cis-1,2-Dichloroethene	<260.		105.94	06/10/99	
Bromochloromethane	<260.		105.94	06/10/99	
Chloroform	<260.		105.94	06/10/99	
2,2-Dichloropropane	<260.		105.94	06/10/99	
1,2-Dichloroethane	<260.		105.94	06/10/99	
1,1,1-Trichloroethane	<260.		105.94	06/10/99	
1,1-Dichloropropene	<260.		105.94	06/10/99	
Carbon tetrachloride	<260.		105.94	06/10/99	
Benzene	<260.		105.94	06/10/99	
Dibromomethane	<260.		105.94	06/10/99	
1,2-Dichloropropane	<260.		105.94	06/10/99	
Trichloroethene	<260.		105.94	06/10/99	
Bromodichloromethane	<260.		105.94	06/10/99	
cis-1,3-Dichloropropene	<260.		105.94	06/10/99	
trans-1,3-Dichloropropene	<260.		105.94	06/10/99	
1,1,2-Trichloroethane	<260.		105.94	06/10/99	
Toluene	<260.		105.94	06/10/99	
1,3-Dichloropropane	<260.		105.94	06/10/99	
Dibromochloromethane	<260.		105.94	06/10/99	

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: June 14,1999 Monika Santucci

O'Brien & Gere Laboratories, Inc.

Analytical Results Method: 8260

Client: O'Brien & Gere Technical Services, Inc.
Project: Accurate Die Casting
Proj. Desc: Fayetteville, New York

Job No.: 2488.080.517
Certification NY No.: 10155

Sample: M3750
Samp. Description: Soil Pile #1 South Face
Instrument: HP5970 GC/MS#2
Units: ug/Kg Dry weight
Number of analytes: 62

Collected: 06/04/99
Received: 06/04/99
Prepared: 06/10/99

Matrix: Solid
QC Batch: 061099S2
%Solids: 87.5
Sample size: 4.72 g

Parameter	Result	Surrog Limits	Dilution	Analyzed	Notes
1,2-Dibromoethane	<260.		105.94	06/10/99	
Tetrachloroethene	<260.		105.94	06/10/99	
1,1,1,2-Tetrachloroethane	<260.		105.94	06/10/99	
Chlorobenzene	<260.		105.94	06/10/99	
Ethylbenzene	<260.		105.94	06/10/99	
Bromoform	<260.		105.94	06/10/99	
Xylene (total)	<260.		105.94	06/10/99	
Styrene	<260.		105.94	06/10/99	
1,1,2,2-Tetrachloroethane	<260.		105.94	06/10/99	
1,2,3-Trichloropropane	<260.		105.94	06/10/99	
Isopropylbenzene	<260.		105.94	06/10/99	
Bromobenzene	<260.		105.94	06/10/99	
n-Propylbenzene	<260.		105.94	06/10/99	
2-Chlorotoluene	<260.		105.94	06/10/99	
4-Chlorotoluene	<260.		105.94	06/10/99	
1,3,5-Trimethylbenzene	<260.		105.94	06/10/99	
tert-Butylbenzene	<260.		105.94	06/10/99	
n-Butylbenzene	<260.		105.94	06/10/99	
1,2,4-Trimethylbenzene	<260.		105.94	06/10/99	
sec-Butylbenzene	<260.		105.94	06/10/99	
1,3-Dichlorobenzene	<260.		105.94	06/10/99	
1,4-Dichlorobenzene	<260.		105.94	06/10/99	
p-Isopropyltoluene	<260.		105.94	06/10/99	
1,2-Dichlorobenzene	<260.		105.94	06/10/99	
1,2-Dibromo-3-chloropropane	<260.		105.94	06/10/99	
1,2,4-Trichlorobenzene	<260.		105.94	06/10/99	
Naphthalene	<260.		105.94	06/10/99	
Hexachlorobutadiene	<260.		105.94	06/10/99	
1,2,3-Trichlorobenzene	<260.		105.94	06/10/99	
Dibromofluoromethane (surrogate)	102.%	70-129	105.94	06/10/99	
1,2-Dichloroethane-d4 (surrogate)	95.%	70-121	105.94	06/10/99	

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: June 14, 1999 Monika Santucci

O'Brien & Gere Laboratories, Inc.

Analytical Results Method: 8260

Client: O'Brien & Gere Technical Services, Inc.
Project: Accurate Die Casting
Proj. Desc: Fayetteville, New York

Job No.: 2488.080.517
Certification NY No.: 10155

Sample: M3750
Samp. Description: Soil Pile #1 South Face
Instrument: HP5970 GC/MS#2
Units: ug/Kg Dry weight
Number of analytes: 62

Collected: 06/04/99
Received: 06/04/99
Prepared: 06/10/99

Matrix: Solid
QC Batch: 061099S2
%Solids: 87.5
Sample size: 4.72 g

Parameter	Result	Surrog Limits	Dilution	Analyzed	Notes
Toluene-d8 (surrogate)	100.%	70-124	105.94	06/10/99	
Bromofluorobenzene (surrogate)	96.%	72-130	105.94	06/10/99	

Notes:

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: June 14,1999 Monika Santucci

O'Brien & Gere Laboratories,Inc.

Analytical Results Method: 8260

Client: O'Brien & Gere Technical Services, Inc.
Project: Accurate Die Casting
Proj. Desc: Fayetteville, New York

Job No.: 2488.080.517
Certification NY No.: 10155

Sample: M3751
Samp. Description: Soil Pile #1 North Face
Instrument: HP5970 GC/MS#2
Units: ug/Kg Dry weight
Number of analytes: 62

Collected: 06/04/99
Received: 06/04/99
Prepared: 06/10/99

Matrix: Solid
QC Batch: 061099S2
%Solids: 82.7
Sample size: 4.74 g

Parameter	Result	Surrog Limits	Dilution	Analyzed	Notes
Dichlorodifluoromethane	<530.		105.48	06/10/99	
Chloromethane	<530.		105.48	06/10/99	
Vinyl chloride	<530.		105.48	06/10/99	
Bromomethane	<530.		105.48	06/10/99	
Chloroethane	<530.		105.48	06/10/99	
Trichlorofluoromethane	<530.		105.48	06/10/99	
1,1-Dichloroethene	<260.		105.48	06/10/99	
Methylene chloride	<530.		105.48	06/10/99	
trans-1,2-Dichloroethene	<260.		105.48	06/10/99	
1,1-Dichloroethane	<260.		105.48	06/10/99	
cis-1,2-Dichloroethene	<260.		105.48	06/10/99	
Bromochloromethane	<260.		105.48	06/10/99	
Chloroform	<260.		105.48	06/10/99	
2,2-Dichloropropane	<260.		105.48	06/10/99	
1,2-Dichloroethane	<260.		105.48	06/10/99	
1,1,1-Trichloroethane	<260.		105.48	06/10/99	
1,1-Dichloropropene	<260.		105.48	06/10/99	
Carbon tetrachloride	<260.		105.48	06/10/99	
Benzene	<260.		105.48	06/10/99	
Dibromomethane	<260.		105.48	06/10/99	
1,2-Dichloropropane	<260.		105.48	06/10/99	
Trichloroethene	<260.		105.48	06/10/99	
Bromodichloromethane	<260.		105.48	06/10/99	
cis-1,3-Dichloropropene	<260.		105.48	06/10/99	
trans-1,3-Dichloropropene	<260.		105.48	06/10/99	
1,1,2-Trichloroethane	<260.		105.48	06/10/99	
Toluene	<260.		105.48	06/10/99	
1,3-Dichloropropane	<260.		105.48	06/10/99	
Dibromochloromethane	<260.		105.48	06/10/99	

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: June 14,1999 Monika Santucci

O'Brien & Gere Laboratories,Inc.

Analytical Results Method: 8260

Client: O'Brien & Gere Technical Services, Inc.
Project: Accurate Die Casting
Proj. Desc: Fayetteville, New York

Job No.: 2488.080.517
Certification NY No.: 10155

Sample: M3751
Samp. Description: Soil Pile #1 North Face
Instrument: HP5970 GC/MS#2
Units: ug/Kg Dry weight
Number of analytes: 62

Collected: 06/04/99
Received: 06/04/99
Prepared: 06/10/99

Matrix: Solid
QC Batch: 061099S2
%Solids: 82.7
Sample size: 4.74 g

Parameter	Result	Surrog Limits	Dilution	Analyzed	Notes
1,2-Dibromoethane	<260.		105.48	06/10/99	
Tetrachloroethene	<260.		105.48	06/10/99	
1,1,1,2-Tetrachloroethane	<260.		105.48	06/10/99	
Chlorobenzene	<260.		105.48	06/10/99	
Ethylbenzene	<260.		105.48	06/10/99	
Bromoform	<260.		105.48	06/10/99	
Xylene (total)	<260.		105.48	06/10/99	
Styrene	<260.		105.48	06/10/99	
1,1,2,2-Tetrachloroethane	<260.		105.48	06/10/99	
1,2,3-Trichloropropane	<260.		105.48	06/10/99	
Isopropylbenzene	<260.		105.48	06/10/99	
Bromobenzene	<260.		105.48	06/10/99	
n-Propylbenzene	<260.		105.48	06/10/99	
2-Chlorotoluene	<260.		105.48	06/10/99	
4-Chlorotoluene	<260.		105.48	06/10/99	
1,3,5-Trimethylbenzene	<260.		105.48	06/10/99	
tert-Butylbenzene	<260.		105.48	06/10/99	
n-Butylbenzene	<260.		105.48	06/10/99	
1,2,4-Trimethylbenzene	<260.		105.48	06/10/99	
sec-Butylbenzene	<260.		105.48	06/10/99	
1,3-Dichlorobenzene	<260.		105.48	06/10/99	
1,4-Dichlorobenzene	<260.		105.48	06/10/99	
p-Isopropyltoluene	<260.		105.48	06/10/99	
1,2-Dichlorobenzene	<260.		105.48	06/10/99	
1,2-Dibromo-3-chloropropane	<260.		105.48	06/10/99	
1,2,4-Trichlorobenzene	<260.		105.48	06/10/99	
Naphthalene	<260.		105.48	06/10/99	
Hexachlorobutadiene	<260.		105.48	06/10/99	
1,2,3-Trichlorobenzene	<260.		105.48	06/10/99	
Dibromofluoromethane (surrogate)	102.%	70-129	105.48	06/10/99	
1,2-Dichloroethane-d4 (surrogate)	97.%	70-121	105.48	06/10/99	

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: June 14,1999 Monika Santucci

5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

O'Brien & Gere Laboratories,Inc.

Analytical Results Method: 8260

Client: O'Brien & Gere Technical Services, Inc.
Project: Accurate Die Casting
Proj. Desc: Fayetteville, New York

Job No.: 2488.080.517
Certification NY No.: 10155

Sample: M3751
Samp. Description: Soil Pile #1 North Face
Instrument: HP5970 GC/MS#2
Units: ug/Kg Dry weight
Number of analytes: 62

Collected: 06/04/99
Received: 06/04/99
Prepared: 06/10/99

Matrix: Solid
QC Batch: 061099S2
%Solids: 82.7
Sample size: 4.74 g

Parameter	Result	Surrog Limits	Dilution	Analyzed	Notes
Toluene-d8 (surrogate)	102.%	70-124	105.48	06/10/99	
Bromofluorobenzene (surrogate)	87.%	72-130	105.48	06/10/99	

Notes:

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: June 14,1999 Monika Santucci

O'Brien & Gere Laboratories,Inc.

Analytical Results Method: 8260

Client: O'Brien & Gere Technical Services, Inc.
Project: Accurate Die Casting
Proj. Desc: Fayetteville, New York

Job No.: 2488.080.517
Certification NY No.: 10155

Sample: M3752
Samp. Description: Soil Pile #2 East Face
Instrument: HP5970 GC/MS#2
Units: ug/Kg Dry weight
Number of analytes: 62

Collected: 06/04/99
Received: 06/04/99
Prepared: 06/10/99

Matrix: Solid
QC Batch: 061099S2
%Solids: 89.1
Sample size: 4.79 g

Parameter	Result	Surrog Limits	Dilution	Analyzed	Notes
Dichlorodifluoromethane	<520.		104.38	06/10/99	
Chloromethane	<520.		104.38	06/10/99	
Vinyl chloride	<520.		104.38	06/10/99	
Bromomethane	<520.		104.38	06/10/99	
Chloroethane	<520.		104.38	06/10/99	
Trichlorofluoromethane	<520.		104.38	06/10/99	
1,1-Dichloroethene	<260.		104.38	06/10/99	
Methylene chloride	<520.		104.38	06/10/99	
trans-1,2-Dichloroethene	<260.		104.38	06/10/99	
1,1-Dichloroethane	<260.		104.38	06/10/99	
cis-1,2-Dichloroethene	<260.		104.38	06/10/99	
Bromochloromethane	<260.		104.38	06/10/99	
Chloroform	<260.		104.38	06/10/99	
2,2-Dichloropropane	<260.		104.38	06/10/99	
1,2-Dichloroethane	<260.		104.38	06/10/99	
1,1,1-Trichloroethane	<260.		104.38	06/10/99	
1,1-Dichloropropene	<260.		104.38	06/10/99	
Carbon tetrachloride	<260.		104.38	06/10/99	
Benzene	<260.		104.38	06/10/99	
Dibromomethane	<260.		104.38	06/10/99	
1,2-Dichloropropane	<260.		104.38	06/10/99	
Trichloroethene	<260.		104.38	06/10/99	
Bromodichloromethane	<260.		104.38	06/10/99	
cis-1,3-Dichloropropene	<260.		104.38	06/10/99	
trans-1,3-Dichloropropene	<260.		104.38	06/10/99	
1,1,2-Trichloroethane	<260.		104.38	06/10/99	
Toluene	<260.		104.38	06/10/99	
1,3-Dichloropropane	<260.		104.38	06/10/99	
Dibromochloromethane	<260.		104.38	06/10/99	

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: June 14,1999 Monika Santucci

O'Brien & Gere Laboratories,Inc.

Analytical Results Method: 8260

Client: O'Brien & Gere Technical Services, Inc.
Project: Accurate Die Casting
Proj. Desc: Fayetteville, New York

Job No.: 2488.080.517
Certification NY No.: 10155

Sample: M3752
Samp. Description: Soil Pile #2 East Face
Instrument: HP5970 GC/MS#2
Units: ug/Kg Dry weight
Number of analytes: 62

Collected: 06/04/99
Received: 06/04/99
Prepared: 06/10/99

Matrix: Solid
QC Batch: 061099S2
%Solids: 89.1
Sample size: 4.79 g

Parameter	Result	Surrog Limits	Dilution	Analyzed	Notes
1,2-Dibromoethane	<260.		104.38	06/10/99	
Tetrachloroethene	<260.		104.38	06/10/99	
1,1,1,2-Tetrachloroethane	<260.		104.38	06/10/99	
Chlorobenzene	<260.		104.38	06/10/99	
Ethylbenzene	<260.		104.38	06/10/99	
Bromoform	<260.		104.38	06/10/99	
Xylene (total)	<260.		104.38	06/10/99	
Styrene	<260.		104.38	06/10/99	
1,1,2,2-Tetrachloroethane	<260.		104.38	06/10/99	
1,2,3-Trichloropropane	<260.		104.38	06/10/99	
Isopropylbenzene	<260.		104.38	06/10/99	
Bromobenzene	<260.		104.38	06/10/99	
n-Propylbenzene	<260.		104.38	06/10/99	
2-Chlorotoluene	<260.		104.38	06/10/99	
4-Chlorotoluene	<260.		104.38	06/10/99	
1,3,5-Trimethylbenzene	<260.		104.38	06/10/99	
tert-Butylbenzene	<260.		104.38	06/10/99	
n-Butylbenzene	<260.		104.38	06/10/99	
1,2,4-Trimethylbenzene	<260.		104.38	06/10/99	
sec-Butylbenzene	<260.		104.38	06/10/99	
1,3-Dichlorobenzene	<260.		104.38	06/10/99	
1,4-Dichlorobenzene	<260.		104.38	06/10/99	
p-Isopropyltoluene	<260.		104.38	06/10/99	
1,2-Dichlorobenzene	<260.		104.38	06/10/99	
1,2-Dibromo-3-chloropropane	<260.		104.38	06/10/99	
1,2,4-Trichlorobenzene	<260.		104.38	06/10/99	
Naphthalene	<260.		104.38	06/10/99	
Hexachlorobutadiene	<260.		104.38	06/10/99	
1,2,3-Trichlorobenzene	<260.		104.38	06/10/99	
Dibromofluoromethane (surrogate)	100.%	70-129	104.38	06/10/99	
1,2-Dichloroethane-d4 (surrogate)	91.%	70-121	104.38	06/10/99	

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: June 14,1999 Monika Santucci

O'Brien & Gere Laboratories,Inc.

Analytical Results Method: 8260

Client: O'Brien & Gere Technical Services, Inc.
Project: Accurate Die Casting
Proj. Desc: Fayetteville, New York

Job No.: 2488.080.517
Certification NY No.: 10155

Sample: M3752
Samp. Description: Soil Pile #2 East Face
Instrument: HP5970 GC/MS#2
Units: ug/Kg Dry weight
Number of analytes: 62

Collected: 06/04/99
Received: 06/04/99
Prepared: 06/10/99

Matrix: Solid
QC Batch: 061099S2
%Solids: 89.1
Sample size: 4.79 g

Parameter	Result	Surrog Limits	Dilution	Analyzed	Notes
Toluene-d8 (surrogate)	100.%	70-124	104.38	06/10/99	
Bromofluorobenzene (surrogate)	102.%	72-130	104.38	06/10/99	

Notes:

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: June 14,1999 Monika Santucci

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O'Brien & Gere Laboratories,Inc.

Analytical Results Method: 8260

Client: O'Brien & Gere Technical Services, Inc.
Project: Accurate Die Casting
Proj. Desc: Fayetteville, New York

Job No.: 2488.080.517
Certification NY No.: 10155

Sample: M3753
Samp. Description: QC Trip Blank
Instrument: HP5970 GC/MS#2
Units: ug/L
Number of analytes: 62

Collected: 06/04/99
Received: 06/04/99
Prepared: 06/10/99

Matrix: Water
QC Batch: 061099S2
%Solids:
Purge volume: 25 mL

Parameter	Result	Surrog Limits	Dilution	Analyzed	Notes
Dichlorodifluoromethane	<5.0		5	06/10/99	
Chloromethane	<5.0		5	06/10/99	
Vinyl chloride	<5.0		5	06/10/99	
Bromomethane	<5.0		5	06/10/99	
Chloroethane	<5.0		5	06/10/99	
Trichlorofluoromethane	<5.0		5	06/10/99	
1,1-Dichloroethene	<2.5		5	06/10/99	
Methylene chloride	<5.0		5	06/10/99	
trans-1,2-Dichloroethene	<2.5		5	06/10/99	
1,1-Dichloroethane	<2.5		5	06/10/99	
cis-1,2-Dichloroethene	<2.5		5	06/10/99	
Bromochloromethane	<2.5		5	06/10/99	
Chloroform	<2.5		5	06/10/99	
2,2-Dichloropropane	<2.5		5	06/10/99	
1,2-Dichloroethane	<2.5		5	06/10/99	
1,1,1-Trichloroethane	<2.5		5	06/10/99	
1,1-Dichloropropene	<2.5		5	06/10/99	
Carbon tetrachloride	<2.5		5	06/10/99	
Benzene	<2.5		5	06/10/99	
Dibromomethane	<2.5		5	06/10/99	
1,2-Dichloropropane	<2.5		5	06/10/99	
Trichloroethene	<2.5		5	06/10/99	
Bromodichloromethane	<2.5		5	06/10/99	
cis-1,3-Dichloropropene	<2.5		5	06/10/99	
trans-1,3-Dichloropropene	<2.5		5	06/10/99	
1,1,2-Trichloroethane	<2.5		5	06/10/99	
Toluene	<2.5		5	06/10/99	
1,3-Dichloropropane	<2.5		5	06/10/99	
Dibromochloromethane	<2.5		5	06/10/99	

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: June 14,1999 Monika Santucci

O'Brien & Gere Laboratories,Inc.

Analytical Results Method: 8260

Client: O'Brien & Gere Technical Services, Inc.
Project: Accurate Die Casting
Proj. Desc: Fayetteville, New York

Job No.: 2488.080.517
Certification NY No.: 10155

Sample: M3753
Samp. Description: QC Trip Blank
Instrument: HP5970 GC/MS#2
Units: ug/L
Number of analytes: 62

Collected: 06/04/99
Received: 06/04/99
Prepared: 06/10/99

Matrix: Water
QC Batch: 061099S2
%Solids:
Purge volume: 25 mL

Parameter	Result	Surrog Limits	Dilution	Analyzed	Notes
1,2-Dibromoethane	<2.5		5	06/10/99	
Tetrachloroethene	<2.5		5	06/10/99	
1,1,1,2-Tetrachloroethane	<2.5		5	06/10/99	
Chlorobenzene	<2.5		5	06/10/99	
Ethylbenzene	<2.5		5	06/10/99	
Bromoform	<2.5		5	06/10/99	
Xylene (total)	<2.5		5	06/10/99	
Styrene	<2.5		5	06/10/99	
1,1,2,2-Tetrachloroethane	<2.5		5	06/10/99	
1,2,3-Trichloropropane	<2.5		5	06/10/99	
Isopropylbenzene	<2.5		5	06/10/99	
Bromobenzene	<2.5		5	06/10/99	
n-Propylbenzene	<2.5		5	06/10/99	
2-Chlorotoluene	<2.5		5	06/10/99	
4-Chlorotoluene	<2.5		5	06/10/99	
1,3,5-Trimethylbenzene	<2.5		5	06/10/99	
tert-Butylbenzene	<2.5		5	06/10/99	
n-Butylbenzene	<2.5		5	06/10/99	
1,2,4-Trimethylbenzene	<2.5		5	06/10/99	
sec-Butylbenzene	<2.5		5	06/10/99	
1,3-Dichlorobenzene	<2.5		5	06/10/99	
1,4-Dichlorobenzene	<2.5		5	06/10/99	
p-Isopropyltoluene	<2.5		5	06/10/99	
1,2-Dichlorobenzene	<2.5		5	06/10/99	
1,2-Dibromo-3-chloropropane	<2.5		5	06/10/99	
1,2,4-Trichlorobenzene	<2.5		5	06/10/99	
Naphthalene	<2.5		5	06/10/99	
Hexachlorobutadiene	<2.5		5	06/10/99	
1,2,3-Trichlorobenzene	<2.5		5	06/10/99	
Dibromofluoromethane (surrogate)	105.%	61-136	5	06/10/99	
1,2-Dichloroethane-d4 (surrogate)	99.%	80-135	5	06/10/99	

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: June 14,1999 Monika Santucci

O'Brien & Gere Laboratories,Inc.

Analytical Results Method: 8260

Client: O'Brien & Gere Technical Services, Inc.
Project: Accurate Die Casting
Proj. Desc: Fayetteville, New York

Job No.: 2488.080.517
Certification NY No.: 10155

Sample: M3753
Samp. Description: QC Trip Blank
Instrument: HP5970 GC/MS#2
Units: ug/L
Number of analytes: 62

Collected: 06/04/99
Received: 06/04/99
Prepared: 06/10/99

Matrix: Water
QC Batch: 061099S2
%Solids:
Purge volume: 25 mL

Parameter	Result	Surrog Limits	Dilution	Analyzed	Notes
Toluene-d8 (surrogate)	98.%	84-114	5	06/10/99	
Bromofluorobenzene (surrogate)	96.%	77-117	5	06/10/99	

Notes:

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: June 14,1999 Monika Santucci

O'Brien & Gere Laboratories,Inc.

Analytical Results Method: 8260

Client: O'Brien & Gere Technical Services, Inc.
Project: Accurate Die Casting
Proj. Desc: Fayetteville, New York

Job No.: 2488.080.517
Certification NY No.: 10155

Sample: M3754
Samp. Description: Methanol Blank
Instrument: HP5970 GC/MS#2
Units: ug/Kg Original weight
Number of analytes: 62

Collected: 06/04/99
Received: 06/04/99
Prepared: 06/10/99

Matrix: Solid
QC Batch: 061099S2
%Solids:
Sample size: 5 g

Parameter	Result	Surrog Limits	Dilution	Analyzed	Notes
Dichlorodifluoromethane	<500.		100	06/10/99	
Chloromethane	<500.		100	06/10/99	
Vinyl chloride	<500.		100	06/10/99	
Bromomethane	<500.		100	06/10/99	
Chloroethane	<500.		100	06/10/99	
Trichlorofluoromethane	<500.		100	06/10/99	
1,1-Dichloroethene	<250.		100	06/10/99	
Methylene chloride	<500.		100	06/10/99	
trans-1,2-Dichloroethene	<250.		100	06/10/99	
1,1-Dichloroethane	<250.		100	06/10/99	
cis-1,2-Dichloroethene	<250.		100	06/10/99	
Bromochloromethane	<250.		100	06/10/99	
Chloroform	<250.		100	06/10/99	
2,2-Dichloropropane	<250.		100	06/10/99	
1,2-Dichloroethane	<250.		100	06/10/99	
1,1,1-Trichloroethane	<250.		100	06/10/99	
1,1-Dichloropropene	<250.		100	06/10/99	
Carbon tetrachloride	<250.		100	06/10/99	
Benzene	<250.		100	06/10/99	
Dibromomethane	<250.		100	06/10/99	
1,2-Dichloropropane	<250.		100	06/10/99	
Trichloroethene	<250.		100	06/10/99	
Bromodichloromethane	<250.		100	06/10/99	
cis-1,3-Dichloropropene	<250.		100	06/10/99	
trans-1,3-Dichloropropene	<250.		100	06/10/99	
1,1,2-Trichloroethane	<250.		100	06/10/99	
Toluene	<250.		100	06/10/99	
1,3-Dichloropropane	<250.		100	06/10/99	
Dibromochloromethane	<250.		100	06/10/99	

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: June 14,1999 Monika Santucci

O'Brien & Gere Laboratories,Inc.

Analytical Results Method: 8260

Client: O'Brien & Gere Technical Services, Inc.
Project: Accurate Die Casting
Proj. Desc: Fayetteville, New York

Job No.: 2488.080.517
Certification NY No.: 10155

Sample: M3754
Samp. Description: Methanol Blank
Instrument: HP5970 GC/MS#2
Units: ug/Kg Original weight
Number of analytes: 62

Collected: 06/04/99
Received: 06/04/99
Prepared: 06/10/99

Matrix: Solid
QC Batch: 061099S2
%Solids:
Sample size: 5 g

Parameter	Result	Surrog Limits	Dilution	Analyzed	Notes
1,2-Dibromoethane	<250.		100	06/10/99	
Tetrachloroethene	<250.		100	06/10/99	
1,1,1,2-Tetrachloroethane	<250.		100	06/10/99	
Chlorobenzene	<250.		100	06/10/99	
Ethylbenzene	<250.		100	06/10/99	
Bromoform	<250.		100	06/10/99	
Xylene (total)	<250.		100	06/10/99	
Styrene	<250.		100	06/10/99	
1,1,2,2-Tetrachloroethane	<250.		100	06/10/99	
1,2,3-Trichloropropane	<250.		100	06/10/99	
Isopropylbenzene	<250.		100	06/10/99	
Bromobenzene	<250.		100	06/10/99	
n-Propylbenzene	<250.		100	06/10/99	
2-Chlorotoluene	<250.		100	06/10/99	
4-Chlorotoluene	<250.		100	06/10/99	
1,3,5-Trimethylbenzene	<250.		100	06/10/99	
tert-Butylbenzene	<250.		100	06/10/99	
n-Butylbenzene	<250.		100	06/10/99	
1,2,4-Trimethylbenzene	<250.		100	06/10/99	
sec-Butylbenzene	<250.		100	06/10/99	
1,3-Dichlorobenzene	<250.		100	06/10/99	
1,4-Dichlorobenzene	<250.		100	06/10/99	
p-Isopropyltoluene	<250.		100	06/10/99	
1,2-Dichlorobenzene	<250.		100	06/10/99	
1,2-Dibromo-3-chloropropane	<250.		100	06/10/99	
1,2,4-Trichlorobenzene	<250.		100	06/10/99	
Naphthalene	<250.		100	06/10/99	
Hexachlorobutadiene	<250.		100	06/10/99	
1,2,3-Trichlorobenzene	<250.		100	06/10/99	
Dibromofluoromethane (surrogate)	100.%	70-129	100	06/10/99	
1,2-Dichloroethane-d4 (surrogate)	92.%	70-121	100	06/10/99	

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: June 14,1999 Monika Santucci

O'Brien & Gere Laboratories,Inc.

Analytical Results Method: 8260

Client: O'Brien & Gere Technical Services, Inc.
Project: Accurate Die Casting
Proj. Desc: Fayetteville, New York

Job No.: 2488.080.517
Certification NY No.: 10155

Sample: M3754
Samp. Description: Methanol Blank
Instrument: HP5970 GC/MS#2
Units: ug/Kg Original weight
Number of analytes: 62

Collected: 06/04/99
Received: 06/04/99
Prepared: 06/10/99

Matrix: Solid
QC Batch: 061099S2
%Solids:
Sample size: 5 g

Parameter	Result	Surrog Limits	Dilution	Analyzed	Notes
Toluene-d8 (surrogate)	101.%	70-124	100	06/10/99	
Bromofluorobenzene (surrogate)	99.%	72-130	100	06/10/99	

Notes:

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: June 14,1999 Monika Santucci

O'Brien & Gere Laboratories, Inc.

Analytical Results Wet Chemistry

Client: O'Brien & Gere Technical Services, Inc.
Project: Accurate Die Casting
Proj. Desc: Fayetteville, New York

Job No.: 2488.080.517
Certification NY No.: 10155

Sample: M3750
Samp. Description: Soil Pile #1 South Face

Collected: 06/04/99
Received: 06/04/99 11:40

Matrix: Solid

Parameter	Result	Qual	MDL	RL	Units	Method	Prepared	Analyzed	QC Batch	Note
% Total Solids	87.5			1	%	2540-G		06/07/99	060799S12	

Notes:

Sample: M3751
Samp. Description: Soil Pile #1 North Face

Collected: 06/04/99
Received: 06/04/99 11:40

Matrix: Solid

Parameter	Result	Qual	MDL	RL	Units	Method	Prepared	Analyzed	QC Batch	Note
% Total Solids	82.7			1	%	2540-G		06/07/99	060799S12	

Notes:

Sample: M3752
Samp. Description: Soil Pile #2 East Face

Collected: 06/04/99
Received: 06/04/99 11:40

Matrix: Solid

Parameter	Result	Qual	MDL	RL	Units	Method	Prepared	Analyzed	QC Batch	Note
% Total Solids	89.1			1	%	2540-G		06/07/99	060799S12	

Notes:

U-Undetected at reported level. J-reported value is estimated.

Authorized: Monika Santucci
Date: June 10,1999 Monika Santucci

5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

O'Brien & Gere Laboratories, Inc.

5000 Brittonfield Parkway
East Syracuse, New York 13057
(315) 437-0200

Chain of Custody

DOSS

Client: O'Brien & Gere Engineers, Inc.
Project: Former Accurate Die Casting Facility
Sampled by: David J. Carnevale
Client Contact: Phone #

Sample Description

Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers	Analysis/Method: VOC (SW846)	Analysis/Method: % Solids	Comments
Soil Pile #1 South Face	6/4/99	0945	Soil	Grab	3	X	X	#1-38.43 / #2-38.6
Soil Pile #1 North Face	6/4/99	1000	Soil	Grab	3	X	X	#4-38.52
Soil Pile #2 East Face	6/4/99	1015	Soil	Grab	3	X	X	#5-38.58 / #6-38.4
TRIP BLANK	6/1/99	—	Water	Grab	1	X		
Methanol Blank	6/4/99	—	Methanol	Grab	1	X		

Relinquished by: David J Carnevale	Date: 6/4/99	Time: 1140	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by Lab: Mark F. Jackson	Date: 6/4/99	Time: 11:40
Shipment Method:			Airbill Number:		

Turnaround Time Required:
Routine
Rush (Specify)

Comments:

Cooler Temperature: 12°C

Original-Laboratory Copy-Client

High Concentration Bo[illegible] [illegible]eparation Logsheet

Sample Container Nbr	Methanol Lot and Brand	ml of Methanol Added	Date Prepared	Weight of Bottle (grams)	Date Returned	Return Weight of Bottle (grams)	Return Weight Recorded By
1	BT971 Burdick & Jackson	10 ml	5/28/99	33.70	6/1/99	38.42	MFJ
2	↓	↓	↓	33 5		38.56	MFJ
3				33.75			
4				33.79		38.53	MFJ
5				33.80		38.59	MFJ
6				33.56		38.38	MFJ
7				33.93	METHANOL	BLANK 33.93	MFJ

H:\PROJMGR\VOL.SHT

Project: Accurate Die

Prepared By: Mark F. Jackson

O'BRIEN & GERE
ENGINEERS, INC.

September 10, 1999

Mr. David Crosby, P.E.
Bureau of Construction Services
Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-7010

Re: Former Accurate Die Casting Site
Fayetteville, NY

File: 2488/23123 #2

Dear Mr. Crosby:

The purpose of this letter is to request that certain revisions, discussed below, be made to the State Pollution Discharge Elimination System (SPDES) permit fact sheet #734052 issued by the New York State Department of Environmental Conservation (NYSDEC) for the Former Accurate Die Casting Site in Fayetteville, New York. This request is being made because the historic record demonstrates consistent SPDES monitoring results since starting the ground water treatment plant (GWTP) on February 5, 1996.

Specifically, it is requested that the requirement to monitor chemical/biological oxygen demand ($CBOD_5$), total kjeldahl nitrogen (TKN), total oxygen demand (TOD), dissolved oxygen (DO) and metals be eliminated. Further, it is requested that the requirement to monitor for acetone, 2-hexanone, and 4-methyl-2-pentatone (MIBK) be eliminated, and that the use of EPA Method 8021, providing the detection limits listed below, be accepted for analyzing the other volatile organic compounds (VOCs) identified by the SPDES permit.

Compound	Proposed Detection Limit (µg/l)	SPDES Discharge Limit (µg/l)
cis-1,2-Dichloroethene	1	10
trans-1,2-Dichioroethene	1	10
Methylene chloride	1	50
1,1,2,2-Tetrachloroethane	1	30
Tetrachloroethene	1	20
Toluene	1	20
Trichloroethene	1	10

Also, rather than sampling the effluent for VOCs on two occasions each month, it is proposed that the effluent be sampled on one occasion each month.

O'Brien & Gere Engineers, Inc., an O'Brien & Gere company
5000 Brittonfield Parkway / P.O. Box 4873, Syracuse, New York 13221-4873
(315) 437-6100 / FAX (315) 463-7554 • http:// www.obg.com
... and offices in major U.S. cities

If necessary, we would like to discuss these requests with you during our upcoming meeting at the site. Considering the record of data accumulated since starting the GWTP, we believe that these requests should be approved by the NYSDEC since the GWTP continues to operate without need for modification of procedures.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Alfred R. Farrell, P.E.
Senior Project Engineer

I:\DIV71\PROJECTS\2488\23123\2_CORRES\PERMIT.WPD
Attachments

cc: V. Nattanmai, P.E. - NYSDEC
A. English - NYSDEC
T. Male - NYSDEC
Central Field Unit: Project Attorney Accurate Die Site - NYSDEC
C. Branagh, P.E. - NYSDEC Region 7
Director, Bureau of Environmental Exposure Investigation - NYSDOH (2 copies)
H. Hamel - NYSDOH
T. Brown, P.E. - O'Brien & Gere Technical Services, Inc.
J. Heckathorne, P.E. - O'Brien & Gere Engineers, Inc.
M. Santucci - O'Brien & Gere Laboratories, Inc.

New York State Department of Environmental Conservation
Division of Environmental Remediation
Bureau of Program Management, Room 260A
50 Wolf Road, Albany, New York 12233-7010
Phone: (518) 457-2582 FAX: (518) 457-9639

John P. Cahill
Commissioner

D. Crosby

SEP 23 1999

Certified Mail
Return Receipt Requested

Robert Alessi, Esq.
LeBoef, Lamb, Leiby & MacRae
One Commerce Plaza
Suite 2020
99 Washington Avenue
Albany, NY 12210-2820

SEP 23

Re: Accurate Die Casting Corporation
Site No. 7-34-052
Consent Order Index
No. A7-0318-94-10
Dated: September 26, 1995
Bill No. 3

Dear Mr. Alessi:

Enclosed is a Cost Summary of expenditures incurred by New York State for its activities outlined in the Consent Order in connection with overseeing activities with the Remedial Program at the inactive hazardous waste disposal site. In accordance with Paragraph VIII, Consent Order Index No. A7-0318-94-10, the New York State Department of Environmental Conservation (NYSDEC) is requesting payment in the amount of $23,522.59 within 30 days from receipt of this letter. The check should be made payable to the New York State Department of Environmental Conservation and sent to the address below:

New York State Department of Environmental Conservation
Division of Environmental Remediation
50 Wolf Road, Room 260A
Albany, NY 12233-7010
Attn: Donna Weigel

The summary includes expenditures incurred for the site from May 1, 1997 through October 14, 1998, the latest date for which cost documentation is available. The summary is explained in detail by the enclosed exhibits. However, if you have any questions on the enclosed information, please contact Dottie Norvik at (518) 457-0900.

Thank you for your attention to this matter.

Sincerely,

Donna Weigel

Donna Weigel
Director
Bureau of Program Management
Division of Environmental Remediation

Enclosure

cc: J. Stauber
T. Brown
D. Towers

bcc: D. Desnoyers
D. Norvik
V. Nattanmai
D. Crosby
D. Kulzer

DK
a:
Diane Disk

ART / FILE

New York State Department of Environmental Conservation

MEMORANDUM

TO: Michael J. O'Toole, Director, Division of Environmental Remediation
FROM: Richard Koelling, Director, Bureau of Construction Services, Division of Environmental Remediation
SUBJECT: **Accurate Die Castings, Site No. 7-34-052, Onondaga County Explanation of Significant Differences**

DATE: **September 28, 1998**

Attached for your review and signature is an Explanation of Significant Differences (ESD) for the above-referenced site. The ESD describes the construction of a groundwater collection trench which is in addition to the existing groundwater collection pump and treat system. The need for additional groundwater measures was determined based on results of the long term monitoring program for the site.

In addition, the PRP for the site, ITT Commercial Finance Corporation, requested the Department to prepare the ESD to assist in their cost recovery efforts. The NYSDOH has reviewed and accepted the ESD.

We recommend you sign the ESD.

If you have any questions, please contact me or George Harris at 7-9285.

Attachment
cc: C. Branagh, RHWRE-Region 7

bcc: D. Koelling
G. Harris
A. English/V. Nattanmai
D. Crosby
Dayfile

V. Nattanmai

John P. Cahill
Commissioner

New York State Department of Environmental Conservation

MEMORANDUM

TO: Michael J. O'Toole, Jr., Director, Division of Environmental Remediation
FROM: Edward R. Belmore, Director, Bureau of Western Remedial Action
SUBJECT: **ESD Recommendation: Accurate Die Castings Site No. 7-34-052**

DATE: OCT - 1 1998

Attached for your review and approval is an Explanation of Significant Differences (ESD) prepared by the Bureau of Construction Services (BCS) for the subject site. At your request, we have reviewed the ESD to evaluate its consistency with our understanding of the site remedy and with TAGM 4059.

Regarding the remedy, we have participated in the process BCS has used to determine how to respond to the confirmation of groundwater contamination in the "oil spill area." We concur with the approach as described in the ESD.

Regarding consistency with TAGM 4059, we concur with the designation of this change as significant as opposed to minor or fundamental. Therefore we agree that a ROD amendment is not necessary in this case and that an ESD is appropriate since this represents a significant change in the scope of the remedy.

We recommend your approval of this ESD.

Attachment

cc: w/o att. T. Quinn
G. Harris/D. Crosby
V. Nattanmai

10-1-esd.adc.wpd

2

OCT 0 1 1999

734052 Accurate Die Casting Onondaga Co.
This former die casting site was contaminated with chlorinated VOCs, PAHs and PCBs. The remedy called for soil excavation, septic tank removal and a pump and treat system. The remedy was conducted in 1997.

In the summer of 1998, the PRP submitted and the Department approved, a design for an additional groundwater recovery trench to supplement the existing pump and treat system. An ESD describing the trench was issued in September 1998. The PRP completed construction of the recovery trench in May 1999. The PRP has not been able to start extraction of water due to very low water table conditions.

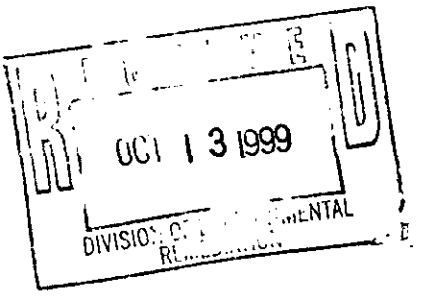
734055 GE Farrell Road Onondaga Co.
This former manufacturing facility has VOC soil and groundwater contamination. A series of source control IRMs have been conducted at the site. The ROD was signed in 1998 and the RD was approved in January 1999. The remedy includes construction of a series of perimeter groundwater recovery wells. On March 8, 1999, the construction was substantially completed. A site-wide O&M plan and final remediation engineering report were received in April 1999 and comments were provided to the PRP.

738029 Miller Container Site Oswego Co.
This former container manufacturing facility has an extensive groundwater plume of chlorinated solvents which has impacted a municipal well field. In 1993, the PRP conducted an IRM which included construction of a treatment plant for the municipal well. A second IRM included installation of source area groundwater recovery wells. In 1995, the ROD was signed and included a larger groundwater recovery system installed at the former plant site. The construction was completed in the spring 1997. The system has been operational for about three years.

The groundwater collection system is yielding less water than anticipated, and the Department has requested enhancements/modifications of the system to increase the hydraulic capture. The PRP disagrees and wants to monitor the system for another year. This could delay the reclass package.

The City of Fulton is conducting a pump test for a new replacement public supply well. The Department has concerns that the

O'BRIEN & GERE
ENGINEERS, INC.



October 8, 1999

Mr. David Crosby, P.E.
Bureau of Construction Services - Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-7010

7-34-052

Re: Former Accurate Die Casting Site
Fayetteville, NY
File: 2488/23123 #2

Dear Mr. Crosby:

This letter presents the status of groundwater treatment plant operations for the former Accurate Die Casting site in Fayetteville, New York for September 1999. This report is provided as required by the Order on Consent (#A7-0318-94-10). Included are the results of the monitoring activities associated with the SPDES Fact Sheet for the ground water treatment system.

1. As of September 30,1999, a total of 29,366,530 gallons of ground water has been treated since startup on February 5, 1996. Since August 31, 1999, 590,710 gallons of groundwater was treated; 496,150 gallons from recovery well RW-1, 88,710 gallons from recovery well RW-2, and 5,850 gallons from the sump outside the northeast corner of the building. No flow was recovered during the period from the groundwater collection trench constructed in the former VOC/PAH/PCB Soils Area.

2. O'Brien & Gere performed the sampling activities associated with the SPDES Fact Sheet (#734052). The analytical results associated with the SPDES Fact Sheet monitoring activities performed in September 1999 are summarized in Table 1. The laboratory analytical data sheets are provided as Attachment A.

If you have any questions regarding this report, please do not hesitate to call me.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Alfred R. Farrell, P.E.
Senior Project Engineer

I:\DIV71\PROJECTS\2488\23123\2_CORRES\9-99MOR.WPD
Attachments
cc: V. Nattanmai, P.E. - NYSDEC
A. English - NYSDEC
T. Male - NYSDEC
Central Field Unit: Project Attorney Accurate Die Site - NYSDEC
C. Branagh, P.E. - NYSDEC Region 7
Director, Bureau of Environmental Exposure Investigation - NYSDOH (2 copies)
H. Hamel - NYSDOH

O'Brien & Gere Engineers, Inc., an O'Brien & Gere company
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... and offices in major U.S. cities

VN
file

O'BRIEN & GERE
ENGINEERS, INC.

September 10, 1999

Mr. David Crosby, P.E.
Bureau of Construction Services
Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-7010

7-34-052

Re: Former Accurate Die Casting Site
Fayetteville, NY

File: 2488/23123 #2

Dear Mr. Crosby:

Enclosed is the monthly progress report, required by the Order on Consent (#A7-0318-94-10) for the former Accurate Die Casting site in Fayetteville, New York, for the month of August 1999. Included in the progress report are the results of the monitoring activities associated with the SPDES Fact Sheet for the ground water treatment system through August 1999. If you have any questions regarding these reports, please do not hesitate to call me.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Alfred R. Farrell, P.E.
Senior Project Engineer

I:\DIV71\PROJECTS\2488\23123\2_CORRES\8-99MOR.WPD
Attachments

cc: V. Nattanmai, P.E. - NYSDEC
A. English - NYSDEC
T. Male - NYSDEC
Central Field Unit: Project Attorney Accurate Die Site - NYSDEC
C. Branagh, P.E. - NYSDEC Region 7
Director, Bureau of Environmental Exposure Investigation - NYSDOH (2 copies)
H. Hamel - NYSDOH
T. Brown, P.E. - O'Brien & Gere Technical Services, Inc.
R. Cheesman, P.E. - O'Brien & Gere Technical Services, Inc

O'Brien & Gere Engineers, Inc., an O'Brien & Gere company
5000 Brittonfield Parkway / PO. Box 4873, Syracuse, New York 13221-4873
(315) 437-6100 / FAX (315) 463-7554 • http:// www.obg.com
... and offices in major U.S. cities

FORMER ACCURATE DIE CASTING SITE
FAYETTEVILLE, NEW YORK

Monthly Progress Report for: August 1999

(a) Activities Performed/Correspondences with NYSDEC

1. During the month of August 1999, O'Brien & Gere continued operating the ground water collection and treatment system. As of August 31,1999, a total of 28,775,820 gallons of ground water has been treated since startup on February 5, 1996. Since July 30, 1999, 686,710 gallons of groundwater was treated; 562,080 gallons from recovery well RW-1 and 124,630 gallons from RW-2. No flow was recovered during the period from the sump outside the northeast corner of the building, or from the groundwater collection trench constructed in the former VOC/PAH/PCB Soils Area.

2. During the month of August 1999, O'Brien & Gere performed the sampling activities associated with the SPDES Fact Sheet (#734052) required by the Consent Order. The results of the SPDES sampling of the groundwater treatment system effluent are discussed in Item b.

(b) Sampling and Test Results

1. The analytical results associated with the SPDES Fact Sheet monitoring activities performed in August 1999 are summarized in Table 1. The laboratory analytical data sheets are provided as Attachment A.

(c) Projected Activities within next 45 days

1. The treatment system performance monitoring will continue to be conducted in accordance with the SPDES Permit fact sheet, as modified on March 13, 1997 and November 21, 1997.

2. Continue operation of the groundwater recovery and treatment system.

(d) Activities in support of Community Relations Plan

1. None

(e) Exceedences to SPDES Fact Sheet Limits

1. None

TELEFAX

O'BRIEN & GERE ENGINEERS, INC. *Direct Line Fax No. (315) 463-7554*

CONFIDENTIALITY NOTICE

Job Number: 2488\23123

Number of Pages: 1 (including cover sheet) Date: October 12, 1999

If pages are missing or illegible, please contact telefax operator

TO: **Dave Crosby**

COMPANY: **NYS Dept. of Environmental Conservation**

FAX NO: **(518) 457-7743**

FROM: **Al Farrell**

ORIGINAL —

____ will follow via regular mail ____ will follow via overnight delivery _X_ will not follow

MESSAGE:

Dave: The annual round of ground water quality monitoring required at the Former Accurate Die Casting Site in Fayetteville, New York will occur on Monday and Tuesday, October 18 and 19, 1999. The field activities will be conducted by a hydrogeologist (Dave Carnevale) from O'Brien & Gere Engineers, Inc. The samples will be analyzed by O'Brien & Gere Laboratories, Inc.

After the results of the annual round of ground water quality monitoring are received, an Annual Report for 1999 will be prepared for presentation to the NYSDEC.

Please note that in accordance with our discussion last month, we will postpone collecting a treatment system effluent sample for the purpose of performing the NYSDEC-requested PCB analysis until some volume of water has been recovered from the ground water interceptor trench installed this past year.

If you have any questions, please do not hesitate to call me at (315) 437-6100 x2316.

RECEIVED
OCT 12 1999
CONSTRUCTION SERVICES

O'BRIEN & GERE
ENGINEERS, INC.

December 13, 1999

Mr. David Crosby, P.E.
Bureau of Construction Services
Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
50 Wolf Road
Albany, NY 12233-7010

Re: Former Accurate Die Casting Site
Fayetteville, NY

File: 2488/23123 #2

Dear Mr. Crosby:

The purpose of this letter is to follow-up the request presented in our September 10, 1999 letter that certain revisions be made to the State Pollution Discharge Elimination System (SPDES) permit fact sheet #734052 for the Former Accurate Die Casting Site in Fayetteville, New York. The request was made because the historic record demonstrates consistent SPDES monitoring results since starting the ground water treatment plant (GWTP) on February 5, 1996.

Specifically, it is requested that the requirement to monitor chemical/biological oxygen demand ($CBOD_5$), total kjeldahl nitrogen (TKN), total oxygen demand (TOD), dissolved oxygen (DO) and metals be eliminated. Further, it is requested that the requirement to monitor for acetone, 2-hexanone, and 4-methyl-2-pentatone (MIBK) be eliminated, and that the use of EPA Method 8021, providing the detection limits listed below, be accepted for analyzing the other volatile organic compounds (VOCs) identified by the SPDES permit.

Compound	Proposed Detection Limit (µg/l)	SPDES Discharge Limit (µg/l)
cis-1,2-Dichloroethene	1	10
trans-1,2-Dichloroethene	1	10
Methylene chloride	1	50
1,1,2,2-Tetrachloroethane	1	30
Tetrachloroethene	1	20
Toluene	1	20
Trichloroethene	1	10

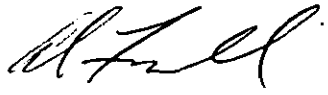
Also, rather than sampling the effluent for VOCs on two occasions each month, it is proposed that the effluent be sampled on one occasion each month.

O'Brien & Gere Engineers, Inc., an O'Brien & Gere company
5000 Brittonfield Parkway / P.O. Box 4873, Syracuse, New York 13221-4873
(315) 437-6100 / FAX (315) 463-7554 • http:// www.obg.com
... and offices in major U.S. cities

Please favor us with a response to this request. If necessary, we could arrange to have a teleconference with you to discuss these requests. Considering the record of data accumulated since starting the GWTP, we believe that these requests should be approved by the NYSDEC since the GWTP continues to operate without need for modification of procedures.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

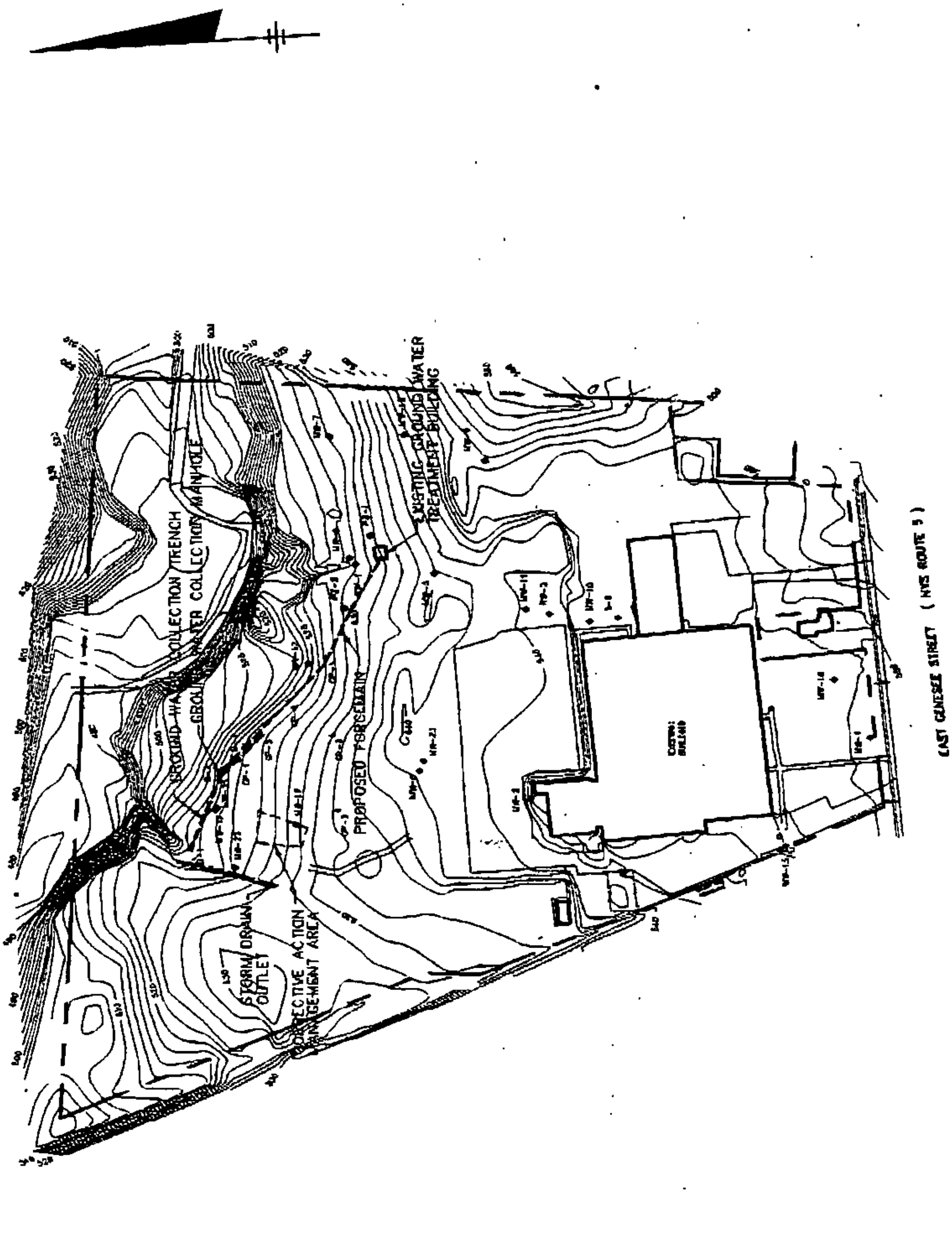


Alfred R. Farrell, P.E.
Senior Project Engineer

I:\DIV71\PROJECTS\2488\23123\2_CORRES\PERMIT1.WPD
Attachments

cc: V. Nattanmai, P.E. - NYSDEC
A. English - NYSDEC
T. Male - NYSDEC
Central Field Unit: Project Attorney Accurate Die Site - NYSDEC
C. Branagh, P.E. - NYSDEC Region 7
Director, Bureau of Environmental Exposure Investigation - NYSDOH
H. Hamel - NYSDOH
T. Brown, P.E. - O'Brien & Gere Technical Services, Inc.
J. Heckathorne, P.E. - O'Brien & Gere Engineers, Inc.
M. Santucci - O'Brien & Gere Laboratories, Inc.

FIGURE 1



FORMER ACCURATE DIE CASTING SITE
FAYETTEVILLE, NEW YORK

SITE PLAN

FILE NO. 2488.731.019
DATE: SEPTEMBER 1998

O'BRIEN & GERE ENGINEERS, INC.

ACD

- monitoring well installation downgradient of trench on Nov 98.

- one of the hotest wells on the site, 6000 ppb VOCs.

Attachment B

Monitoring Well MW-24 Boring Log and Sampling Results

O'BRIEN & GERE ENGINEERS, INC.	TEST BORING LOG	REPORT OF BORING MW-24
Client: OBG Technical Services	Drill Method: Hollow Stem Auger	Page 1 of 1
Proj. Loc: Former Accurate Die	Sampler: 2-inch Split Spoon	Location:
File No.: 2488.731	Hammer: 140 lbs	Start Date: 11/5/98
	Fall: 30 inches	End Date: 11/5/98

Boring Company: Parratt-Wolff
Foreman: Mark Eaves
Drill Rig: CME-55
OBG Geologist: Chawn O'Dell

Screen = | Riser | Steel // | \ Grout | Sand Pack | Bentonite

Depth Below Grade	No.	Depth (feet)	Blows /6"	Penetr/ Recovery	"N" Value	Sample Description	Stratum Change General Descript	Equip. Installed	Field Testing PID (ppm)
0	1	0-2	2-14	2.0/1.5	22	Dark reddish brown (10R 3/4), damp, hard, SILT, some clay, little fine to medium gravel (sub-angular), trace fine to coarse sand.			1.2
			8-14						
1									
2	2	2-4	20-14	2.0/1.8	26	Dark reddish brown (10R 3/4), damp, hard, SILT, some clay, little fine to medium gravel (sub-angular), trace fine to coarse sand, to approx. 3.5 ft, dark yellowish brown (10YR 4/2), saturated, medium dense, fine to medium SAND, little coarse sand, trace silt			2.0
			12-12						
3									
4	3	4-6	6-6	2.0/1.5	13	Dark yellowish brown (10YR 4/2), saturated, medium dense, fine SAND, some medium sand, little coarse sand.		=	40
			7-5					=	
5								=	
6	4	6-8	5-9	2.0/1.5	16	Dark yellowish brown (10YR 4/2), saturated, mediu dense, fine to coarse SAND, little fine to medium gravel (subangular to subrounded), SILT/CLAY, some fine to medium gravel encountered approx. 7.0 to 7.4 ft		=	48
			14-19					=	
7								=	
8	5	8-10	47-50/	2.0/0.0	50+	No Recovery		=	
			0.2					=	
9								=	
10	6	10-10.8	27-50/	0.8/0.4	50+	Grayish red (10YR 4/2), damp, extremely hard, CLAY, some silt, little fine to medium gravel (sub-angular to angular), trace fine to coarse sand.			NA
			0.3						

Notes: Well Installation: 2 inch x 0.010 inch PVC Screen: 9.0 to 4.0 ft Grout: 1.0 to 0.0 ft
Sand Pack: 10.8 to 3.0 ft
Bentonite Seal: 3.0 to 1.0 ft Finished as a stick-up well.

CPO:ers/div58/4_notes/mw-24

O'Brien & Gere Laboratories, Inc.

Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.
Project: Accurate Die Casting
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517
Certification NY No.: 10155

Sample: J9553
Samp. Description: MW-24
Primary column: Y
Units: ug/L
Column: DB-VRX 75m X .45mm ID
Dilution: 200 Instrument: 9001

Collected: 11/09/98
Received: 11/09/98
Prepared:
Analyzed: 11/23/98

Matrix: Water
QC Batch: 112398W1
%Solids:
Purge volume: 5 ml

Number of analytes: 36

Parameter	Result	Col	Surrog Limits	Notes
Benzene	<200.	1		
Bromodichloromethane	<200.	1		
Bromoform	<2000.	1		
Bromomethane	<2000.	1		
Carbon tetrachloride	<200.	1		
Chlorobenzene	<200.	1		
Chloroethane	<200.	1		
2-Chloroethylvinyl ether	<2000.	1		
Chloroform	<200.	1		
Chloromethane	<2000.	1		
Dibromochloromethane	<200.	1		
1,2-Dichlorobenzene	<1000.	1		
1,3-Dichlorobenzene	<1000.	1		
1,4-Dichlorobenzene	<1000.	1		
Dichlorodifluoromethane	<2000.	1		
1,1-Dichloroethane	<200.	1		
1,2-Dichloroethane	<200.	1		
1,1-Dichloroethylene	<200.	1		
cis-1,2-Dichloroethylene	2600.	1		
trans-1,2-Dichloroethylene	<200.	1		
Dichloromethane	<200.	1		
1,2-Dichloropropane	<200.	1		
cis-1,3-Dichloropropylene	<200.	1		
trans-1,3-Dichloropropylene	<200.	1		
Ethylbenzene	<200.	1		
1,1,2,2-Tetrachloroethane	<200.	1		
Tetrachloroethylene	<200.	1		
Toluene	<200.	1		

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: November 24,1998 Monika Santucci

5000 Brittonfield Parkway / Suite 300, Box 4942 / Syracuse, NY 13221 / (315) 437-0200

O'Brien & Gere Laboratories,Inc.

Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.
Project: Accurate Die Casting
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517
Certification NY No.: 10155

Sample: J9553
Samp. Description: MW-24
Primary column: Y
Units: ug/L
Column: DB-VRX 75m X .45mm ID
Dilution: 200 Instrument: 9001

Collected: 11/09/98
Received: 11/09/98
Prepared:
Analyzed: 11/23/98

Matrix: Water
QC Batch: 112398W1
%Solids:
Purge volume: 5 ml

Number of analytes: 36

Parameter	Result	Col	Surrog Limits	Notes
1,1,1-Trichloroethane	<200.	1		
1,1,2-Trichloroethane	<200.	1		
Trichloroethylene	6000.	1		
Trichlorofluoromethane	<200.	1		
Vinyl Chloride	<200.	1		
Xylenes (total)	<600.	1		
2-Chloropropane (surrogate)	87.%	1	69-118	
Fluorobenzene (surrogate)	100.%	1	85-119	

Notes:

- Outside control limits J-Estimated value

Authorized: Monika Santucci
Date: November 24,1998 Monika Santucci

END

OF

DOCUMENT